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THE ARCHÆOLOGY

AND

PREHISTORIC ANNALS OF SCOTLAND.

B 1923

BY

DANIEL WILSON

HONORARY SECRETARY OF THE SOCIETY OF ANTIQUARIES OF SCOTLAND.

29934

"There is in the world no kind of knowledge whereby any part of Truth is seen, but we justly account it precious; yea, that principal Truth, in comparison of which all other knowledge is vile, may reveal [illegible] it some kind of light."—Hooker.

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29934

TO THE MOST HONOURABLE

THE MARQUESS OF BREADALBANE, Kt.,

PRESIDENT OF THE SOCIETY OF ANTIQUARIES OF SCOTLAND.

My Lord Marquess,

In presenting to my fellow-countrymen a Work devoted to the elucidation of their National Antiquities, and to the recovery of the earliest traces of Scottish arts and civilisation, I esteem it a high gratification to be permitted to dedicate it to a Scotsman, not more noble by hereditary rank and social position, than by the virtues with which he adorns his high station.

To you, My Lord, I have reason to believe that the following attempt to establish a consistent and comprehensive system of Scottish Archæology will not be without interest, as the zeal shewn by you in furthering the objects of the Society of which you are President, and the costly donations with which you have enriched its collections, prove the value you attach to the Science as a key to the discovery of important truths.

I have the honour to be,

My Lord Marquess,

Your Lordship's most obedient Servant,

DANIEL WILSON.

Edinburgh, *January* 1851.

00029934

CONTENTS.

Page

PREFACE, ... xi

INTRODUCTION, ... 1

PART I.—THE PRIMEVAL OR STONE PERIOD.

CHAPTER I. THE PRIMEVAL TRANSITION, ... 21

... II. ABORIGINAL TRACES, ... 28

.... III. SEPULCHRAL MEMORIALS, ... 41

... IV. DWELLINGS, ... 74

.... V. TEMPLES AND MEMORIAL STONES, ... 91

... VI. WEAPONS AND IMPLEMENTS, ... 120

... VII. STONE VESSELS, ... 146

... VIII. PERSONAL ORNAMENTS, ... 154

... IX. CRANIA OF THE TUMULI, ... 160

PART II.—THE ARCHAIC OR BRONZE PERIOD.

CHAPTER I. INTRODUCTION OF METALS, ... 191

... II. THE METALLURGIC TRANSITION, ... 217

... III. PRIMITIVE BRONZE, ... 238

... IV. WEAPONS AND IMPLEMENTS, ... 250

... V. DOMESTIC AND SEPULCHRAL VESSELS, ... 271

... VI. PERSONAL ORNAMENTS, ... 291

... VII. SEPULCHRES, ... 331

... VIII. RELIGION, ARTS, AND DOMESTIC HABITS, ... 336

PART III.—THE TEUTONIC OR IRON PERIOD.

CHAPTER I. THE INTRODUCTION OF IRON, ... 347

... II. THE ROMAN INVASION, ... 363

.... III. STRONGHOLDS, ... 408

Page

Chapter IV. Weapons, Implements, and Pottery, . . . 431
... V. Personal Ornaments, ... 442
... VI. Sepulchres of the Iron Period, ... 453.

PART IV.—THE CHRISTIAN PERIOD.

Chapter I. Historical Data, ... 467
II. Sculptured Standing Stones, ... 495
III. The Norrie's Law Relics, ... 511
IV. Scoto-Scandinavian Relics, ... 522
V. Amusements, ... 562
VI. Primitive Ecclesiology, ... 582
VII. Medieval Ecclesiology, ... 600
VIII. Ecclesiastical Antiquities, ... 648
IX. Miscellaneous Antiquities, ... 677
X. Conclusion, ... 695

Index, ... 703

ILLUSTRATIONS.

1. Frontispiece.—Plate V.—Hunterston Runic Brooch.

PART I.—THE PRIMEVAL OR STONE PERIOD.

Page

2. Stone Celt, Glasgow, ... 35
3. Cromlech, the Auld Wives' Lift, ... 66
4. Cromlech, the Witch's Stone, ... 68
5. Plate I.—Plan of Pict's House, Wideford Hill, Orkney, . . . 84
6. The Caiy Stone, ... 96
7. Standing Stones, Pitlochrie, Perthshire, ... 115
8. Flint Arrow-head, Isle of Skye, ... 126
9. Flint Hatchets, ... 130
10. Flail-stone, ... 132
11. Stone Hammers and Axes, ... 135
12. Stone Axes, ... 136
13. Stone Axe-Hammer, ... 137
14. Bead-stones, ... 137
15. Stone Ball, ... 139
16. Bone Dagger, ... 141
17. Bone Pins or Bodkins, ... 143
18. Bone Implements, ... 144
19. Stone Urns, from the Island of Uyea, ... 147
20. Stone Urn, from the Hill of Nowth, ... 147
21. Stone Pateræ, ... 148
22. Stone Basin, from Brough, Shetland, ... 149
23. Stone Basin, from Newgrange, ... 149
24. Indented Stone Basin, from Newgrange, ... 150
25. Pot Querne, from East-Lothian, ... 152
26. Stone Horse Collars, from Glenroy, ... 156
27. 28. Stone Personal Ornaments, ... 157
29. Cranium, from a Cist at Cockenzie, East-Lothian, ... 168
30. Cranium, from a Cairn at Nether Urquhart, Fife, ... 169
31. Cranium, from a Cist, Old Steeple, Montrose, ... 170
32. Cranium, from a Cist, East Broadlaw Farm, Linlithgow, . . . 171
33. Cranium, from a Roman Shaft, Newstead, Roxburghshire, . . . 172
34. Tower of the Old City Wall, Edinburgh, ... 175
35. Plate II.—Glenlyon Brooch, ... 220
36. Highland Powder Horn, ... 221

PART II.—THE ARCHAIC OR BRONZE PERIOD.

37. Pair of Stone Celt Moulds, Ross-shire, ... 223
38. Stone Celt Moulds, Ross-shire, ... 224
39. Celt cast from Stone Moulds, ... 224

40. Bronze Rings and Staples, ... 227
41. Bronze Celt from Arthur's Seat, ... 228
42. Bronze Leaf-shaped Sword from Arthur's Seat, ... 228
43. Spiked Axe, ... 253
44. Incised Axe-blade, ... 253
45. Palstave, ... 254
46. Spade-shaped Palstave, ... 256
47. 48. Looped Palstave and Celt, ... 257
49. Bronze Crowbar or Lever, ... 259
50. Bronze Spear-heads, ... 262
51. Looped Spear-head of Bronze, ... 262
52. Eyed Spear-head of Bronze, ... 263
53. Bronze Dagger, ... 264
54. Bronze Buckler, Ayrshire, ... 267
55. Implement, Isle of Skye, ... 269
56. Bronze Reaping or Pruning-hooks, ... 270
57. Bronze Cauldron from Kincardine Moss, ... 274
58. Bronze Tripods, ... 278
59. Urn from a Cist at Banchory, Aberdeenshire, ... 283
60. Urn with Perforated Ears, from a Cairn at Sheal Loch, ... 285
61. Cinerary Urn from the Dean, Edinburgh, ... 286
62. Cinerary Urns from Memsie and Ratho, ... 287
63. Jet Necklace, from a Tumulus, Ross-shire, ... 294
64. Jet Fibula, Crawford Moor, Lanarkshire, ... 295
65. Jet Belt Clasp, Isle of Skye, ... 297
66. Glass Beads, called "Druidical or Adder Beads," 303
67. Glass Beads, ... 304
68. Dilated Penannular Ring, from a Cist, Alloa, ... 311
69. Calicinated Ring, Cromdale, Inverness-shire, ... 315
70. Calicinated Ring, Island of Islay, ... 316
71. Gold Sceptre Head, Cairnmure, Peeblesshire, ... 317
72. Knotted Funicular Torc, Penicuick, Mid-Lothian, ... 318
73. Spiral Gold Armilla, Largo Bay, Fifeshire, ... 321
74. Gold Armilla, Moor of Rannoch, Perthshire, ... 324
75. Gold Armilla, Slateford, Mid-Lothian, ... 325
76. Bronze Head-ring, Lumphanan, Aberdeenshire, ... 327
77. Bronze Ring Fibula and Spiral Finger Ring, Granton, Mid-Lothian, ... 327
78. Piece of Knitted Garment, from a Cist, Yorkshire, ... 329
79. Incised Cist Cover, Coilsfield, Ayrshire, ... 332
80. Fragment of Cinerary Urn, Coilsfield, ... 333
81. Incised Cist Cover, Annan Street, ... 334
82. Gold Rod, found in the Circle of Leys, Inverness-shire, ... 341

PART III.—THE TEUTONIC OR IRON PERIOD.

83. Coin of Comius, ... 375
84. Inscribed Roman Tablet, from the Castlehill Station, Antonine Wall, ... 376
85. Base of a Column, Castlehill, ... 377
86. Iron Spear-head, from Newstead, Roxburghshire, ... 382
87. Bronze Lamp, found at Currie, ... 385
88. Bronze of Pallas Armata, Kirkintilloch, ... 386
89. Dentated Bronze Ring, Merlsford, Fifeshire, ... 390
90. Roman Oculist's Medicine Stamp, Tranent, East-Lothian, ... 393
91. Impression of Roman Medicine Stamp, ... 394

Page
92. Roman Altar, from Birrens, Annandale, ... 398
93. Roman Sepulchral Tablet, Birrens, ... 400
94. Roman Potters' Stamps, ... 402
95. Iron Forge-Tongs, from Glenorchy, ... 407
96. Bone Comb, Burgh of Burghar, ... 424
97. How of Hoxay, Orkney, ... 426
98. Plan of Doorway, How of Hoxay, ... 427
99. Iron Dagger and Bone Pin, East Langton, Mid-Lothian, . . . 433
100. Glazed Urn, from a Cist, North-Berwick, ... 434
101. Glazed Urn, from a Cairn, Memsie, Aberdeenshire, ... 435
102. Bronze Sword-sheath, ... 441
103. Silver Chain, Caledonian Canal, ... 444
104. Bronze Snake Bracelet, Pitalpin, Angusshire, ... 446
105. Bronze Ornament, ... 447
106. Bronze Snake Armlet, ... 448
107. PLATE III.—BRONZE BEADED TORC, AND BROOCH OF LORN, . . . 449
108. Bronze Head-ring, Cairn of Clunemore, ... 450
109. Head-ring or Diadem, Stichel, Roxburghshire, ... 451
110. Iron Spear-head, Melford, Fifeshire, ... 454
111. Iron Umbo, Ballindalloch, Morayshire, ... 457
112. Enamelled Bridle-Bit, Annandale, ... 458
113. Bronze Rings, Horse Furniture, Annandale, ... 458
114-116. Bronze Ornaments, Horse Furniture, ... 459

PART IV.—THE CHRISTIAN PERIOD.

117. Standing Stone, Hawkhill, Alloa, ... 496
118. Dunnichen Stone, Angusshire, ... 497
119. Silver Scale-plate, Norrie's Law, ... 499
120. Meigle Stone, Angusshire, ... 502
121. PLATE IV.—ST. ANDREW'S SARCOPHAGUS, ... 503
122. Celtic Brooch, ... 504
123. Celtic Dirks, ... 505
124. Inscribed Standing Stone, Newton in Garioch, ... 506
125. Bishop Patrick's Tomb, Iona, ... 507
126. Cross of Lauchlan M'Fingon, Iona, ... 509
127. Silver Bodkins, Norrie's Law, ... 516
128. Silver Ring Fibula, Norrie's Law, ... 517
129. Silver Ornament, Norrie's Law, ... 518
130. Primitive Gold Coins, Cairnmuir, ... 520
131. Oval Brooch, Pict's House, Caithness, ... 523
132. Sculptured Stone, Invergowrie, ... 524
133. Dunipace Brooch, ... 530
134. Runic Inscription, St. Molio's Cave, ... 531
135. Large Runic Inscription, St. Molio's Cave, ... 533
136. Runic Inscription, Greenland, ... 537
137. Kirk Michael Cross, Isle of Man, ... 540
138. Runic Inscription, Kirk Michael Cross, ... 541
139. Kirk Braddan Cross, Isle of Man, ... 542
140. Inscription on the head of Kirk Braddan Cross, ... 542
141. Bronze Ring-Pin, Sandwick, Orkney, ... 551
142. 143. Oval Brooch, Links of Pier-o-waal, Orkney, ... 551
144. Comb, Pier-o-waal, ... 554
145. Bronze Ring-Pin, ... 555

Page

146. Animal-shaped Liquor Decanter, ... 556
147. Acus of Dunipace Brooch, ... 559
148. Glasgow Brooch, ... 560
149. Table-stones, ... 562
150. Lewis Chess-Piece, King, ... 568
151. Lewis Chess-Piece, Queen, ... 568
152. Lewis Chess-Piece, Warden, ... 575
153. Lewis Chess-Piece, Knight, ... 576
154. Chess-Piece, Museum of Scottish Antiquaries, ... 578
155. Chess-Piece, Queen, Penicuick Collection, ... 579
156. Ancient Seal, Abbey of Holyrood, ... 582
157. Doorway, Round Tower of Donaghmore, ... 587
158. St. Magnus's Church, Egilshay, ... 589
159. Doorway, Round Tower of Brechin, ... 596
160. Abbot Crawfurd's Arms, Holyrood Abbey, ... 611
161. Section of Arch Mouldings, St. Rule's Church, St. Andrews, ... 612
162. Section of Pier, St. Rule's, ... 612
163. Chancel Arch, St. Rule's, ... 613
164. Window, Corstorphine, ... 622
165. Corbel, Trinity Church, Edinburgh, ... 624
166. Chantry Door, Bothwell Collegiate Church, ... 627
167. Window, Dunkeld Cathedral, ... 628
168. Window, St. Michael's, Linlithgow, ... 628
169. Bishop Kennedy's Arms, St. Giles's, Edinburgh, ... 629
170. Boss of St. Eloi's Chapel, St. Giles's, ... 631
171. Rothesay Chapel, St. Giles's, ... 632
172. Ambry, Kennedy's Close, ... 637
173. Ambry, Guise Palace, ... 637
174. Monogram, Blyth's Close, ... 638
175. Masons' Marks, Roslin Chapel, ... 640
176. Plate VI.—Kilmichael-Glassrie Bell and Dunvegan Cup, ... 652
177. Bell of St. Columba, ... 654
178. Clog Beanuighte, or Blessed Bell, ... 656
179. Perthshire Bell, ... 658
180. Clog-rinny, or Bell of St. Ninian, ... 660
181. Quigrich, or Crosier of St. Fillan, ... 664
182. Ancient Episcopal Crosier, Fortrose Cathedral, ... 666
183. Oaken Crosier, Cathedral of Kirkwall, ... 667
184. Mazer, Castle of Merdon, near Hursly, ... 672
185. Mazer of the Fourteenth Century, ... 673
186. Gold Ring, Flodden Field, ... 677
187. Medieval Pottery, North-Berwick Abbey, East-Lothian, ... 678
188. Pottery, Penicuick House, ... 679
189. Celtic or Elfin Pipes, ... 679
190. Ancient Stone Tobacco Pipe, Morningside, ... 681
191. Two-handed Scottish Claymore, ... 682
192. Hawthornden Sword, ... 683
193. Scottish Two-Handed Sword, ... 684
194. Battle-Axe, Bannockburn, ... 685
195. Lochaber Axes, ... 686
196. Sculpture, Edinburgh Castle, Mons Meg, ... 686
197. The Scottish Maiden, ... 689
198. Thumb-Screws, ... 690
199. Jougs, Applegirth, ... 691
200. The Branks, Moray House, ... 693
201. Witch's Bridle, Forfar, ... 695

PREFACE.

THE zeal for Archæological investigation which has recently manifested itself in nearly every country of Europe, has been traced, not without reason, to the impulse which proceeded from Abbotsford. Though such is not exactly the source which we might expect to give birth to the transition from profitless dilettantism to the intelligent spirit of scientific investigation, yet it is unquestionable that Sir Walter Scott was the first of modern writers "to teach all men this truth, which looks like a truism, and yet was as good as unknown to writers of history and others, till so taught,—that the bygone ages of the world were actually filled by living men."[1] If, however, the impulse to the pursuit of Archæology as a science be thus traceable to our own country, neither Scotland nor England can lay claim to the merit of having been the first to recognise its true character, or to develop its fruits. The spirit of antiquarianism has not, indeed, slumbered among us. It has taken form in Roxburgh, Bannatyne, Abbotsford, and other literary Clubs, producing valuable results for the use of the historian, but limiting its range within the Medieval era, and abandoning to isolated labourers that ampler field of research which embraces the prehistoric period of nations, and belongs not to literature but to the science of Nature. It was

[1] Carlyle's Miscellanies, second edition, vol. v. p. 301.

not till continental Archæologists had shewn what legitimate induction is capable of, that those of Britain were content to forsake laborious trifling, and associate themselves with renewed energy of purpose to establish the study on its true footing as an indispensable link in the circle of the sciences.

Amid the increasing zeal for the advancement of knowledge, the time appears to have at length come for the thorough elucidation of Primeval Archæology as an element in the history of man. The British Association, expressly constituted for the purpose of giving a stronger impulse and a more systematic direction to scientific inquiry, embraced within its original scheme no provision for the encouragement of those investigations which most directly tend to throw light on the origin and progress of the human race. Physical archæology was indeed admissible, in so far as it dealt with the extinct fauna of the palæontologist; but it was practically pronounced to be without the scientific pale whenever it touched on that portion of the archæology of the globe which comprehends the history of the race of human beings to which we ourselves belong. A delusive hope was indeed raised by the publication in the first volume of the Transactions of the Association, of one memoir on the contributions afforded by physical and philological researches to the history of the human species,—but the ethnologist was doomed to disappointment. During several annual meetings, elaborate and valuable memoirs, prepared on various questions relating to this important branch of knowledge, and to the primeval population of the British Isles, were returned to their authors without being read. This pregnant fact has excited little notice hitherto; but when the scientific history of the first half of the nineteenth century shall come to be reviewed by those who succeed us, and reap the fruits of such advancement as we now aim at, it will not be overlooked as an evidence of the exoteric character of much of the overestimated science of the age. Through the persevering zeal of a few resolute men of distinguished ability, ethnology was at length

afforded a partial footing among the recognised sciences, and at the meeting of the Association to be held at Ipswich in 1851, it will for the first time take its place as a distinct section of British Science.

It has fared otherwise with Archæology. Rejected in its first appeal for a place among the sister sciences, its promoters felt themselves under no necessity to court a share in popular favour which they could readily command, and we have accordingly its annual congresses altogether apart from those of the associated sciences. Archæology, however, has suffered from the isolation; while it cannot but be sooner or later felt to be an inconsistency at once anomalous and pregnant with evil, which recognises as a legitimate branch of British science, the study of the human species, by means both of physiological and philological investigation, but altogether excludes the equally direct evidence which Archæology supplies. It rests, however, with the archæologist to assert for his own study its just place among the essential elements of scientific induction, and to shew that it not only furnishes valuable auxiliary truth in aid of physiological and philological comparisons, but that it adds distinct psychological indices by no other means attainable, and yields the most trustworthy, if not the sole evidence in relation to extinct branches of the human family, the history of which possesses a peculiar national and personal interest for us.

Meanwhile the close relations which subsist between the researches of the ethnologist and the archæologist, and the perfect unity of their aims, have been recognised by Nillson, Eschricht, and other distinguished men in various countries; and while the two sciences have advanced together, in harmony and with mutual advantage, Scandinavian archæologists have given an impetus to the study of Primitive Antiquities, which has already done much to establish its value as the indispensable basis of all written history. The facilities afforded to the Scandinavian archæologist by the purity of his primitive remains, and the

freedom of his ethnographic chronicles from those violent intercalations of foreign elements which render both the ethnology and the historical antiquities of Central Europe so complicated and difficult of solution, peculiarly fitted him for originating a comprehensive yet well-defined system. The comparatively recent close of the Scandinavian primitive periods has preserved in a more complete form those evidences by which we recover the knowledge of the first rude colonists of Europe, whose records are distorted and nearly effaced within the wide pale of Roman sway. The isolation, moreover, of these northern kingdoms preserved them from being the mere highway of the first Asiatic nomades. Whatever traces of early wanderers they retain are well-defined, so that to them we may look for clear and satisfactory evidence in illustration of one portion at least of the primal north-western tide of migration from which the origin of all European history dates. It chances, however, from various accidental causes, that the revival of archæological research in Britain, influenced by canons directly supplied from Scandinavian sources, has a tendency to authenticate some of the most favourite errors of older British antiquaries. Based, as nearly all antiquarian pursuits in this country have heretofore been, on classical learning, it has been accepted as an almost indisputable truth, that, with the exception of the mysteriously learned Druid priests, the Britons prior to the Roman Period were mere painted savages. Hence, while the artless relics of our primeval Stone Period were generally assigned to native workmanship, whatever evinced any remarkable traces of skill distinct from the well-defined Roman art, was assumed of necessity to have a foreign origin, and was usually ascribed to the Danes. The invariable adoption of the latter term in preference to that of Norwegians or Norsemen, shews how completely Scottish and Irish antiquaries have abandoned themselves to the influence of English literature, even where the appropriation of its dogmas was opposed to well-known historical facts. The name of Dane has in fact

for centuries been one of those convenient words which so often take the place of ideas and save the trouble and inconvenience of reasoning. Yet this theory of a Danish origin for nearly all native arts, though adopted without investigation, and fostered in defiance of evidence, has long ceased to be a mere popular error. It pervades both the Scottish and English Archæologiæ, and the great majority of works on every department of British antiquities, and has till recently proved a perpetual stumblingblock to the Irish antiquary. It is, moreover, a cumulative error,—certain Scottish relics, for example, found in Argyleshire, as well as others in the Isle of Man, being assumed in the Archæologia Scotica to be Scandinavian,[1] an able writer in the Transactions of the Cambridge Camden Society, taking these assumptions as indisputable facts, employs them in proving that other equally undoubted native works of art are also Scandinavian.[2] So, too, a writer in the Archæologia Scotica, *ascribing a similar origin to the monolithic structures of the Orkney and Shetland Islands*,[3] is quoted by Danish antiquaries[4] as referring to an established truth, and as proving, accordingly, that similar structures in the Hebrides are also the work of the Northmen! Pennant, Chalmers, Barry, Macculloch, Scott, Hibbert, and a host of other writers might be quoted to shew how this theory, like a snow-ball, gathers as it rolls, taking up indiscriminately whatever chances to lie in its erratic course. Even the poets have lent their aid to propagate the same prevalent error. Cowper, for example,—no uneducated or superficial writer,—thus strangely postdates Britain's birthtime:—

> "Now borne upon the wings of truth sublime,
> Review thy dim original and prime,—
> This island, spot of unreclaimed rude earth,
> The cradle that received thee at thy birth,
> Was rocked by many a rough Norwegian blast,
> And Danish howlings scared thee as they past."[5]

[1] Archæol. Scot., vol. ii. p. 506; vol. iv. p. 119.

[2] Trans. Camb. Camden Soc., vol. i. pp. 76, 91, 176.

[3] Archæol. Scot., vol. iii. p. 103.

[4] Report by the Royal Society of Northern Antiquaries, Copenhagen, 1836, p. 61.

[5] Expostulation.

Similar examples of the influence of this predominant theory might be multiplied from the most diverse sources; nor are even the recently established archæological periodicals free from it. It is obvious, therefore, that such opinions must be sifted to the utmost, and either established or got rid of before any efficient progress can be made in British Archæology. In Scotland this theory is much more comprehensive in its effects than in England, where the Anglo-Saxon element is recognised as the predominating source of later changes; and now that the character of genuine Roman antiquities is well ascertained, nearly the whole of our native relics have latterly been assigned to a Scandinavian origin. It is altogether unnecessary, I trust, to disclaim any petty spirit of national jealousy in the rigorous investigation of such theories which will be found pursued in the following pages. The error is for the most part of native growth; but whencesoever it be derived, truth is the end which the archæologist has in view; and the enlightened spirit in which the researches of the Northern antiquaries have already been pursued, is the best guarantee that they will not be less ready to co-operate in overturning error than in establishing truth. It is not a mere question between Northman or Dane and Celt or Saxon. It involves the entire chronology of the prehistoric British periods, and so long as it remains unsettled any consistent arrangement of our archæological data into a historical sequence is impossible.

The following work, embracing within its plan such a comprehensive scheme of Scottish Archæology as has not been hitherto attempted, has been undertaken under the conviction that this science is the key to great truths which have yet to be reached, and that its importance will hereafter be recognised in a way little dreamt of by those students of kindred sciences, who, while busied in investigating the traces of older but inferior orders of being, can discern only the objects of an aimless curiosity in relics pertaining to the human species. That such, however, should still be the case, is far more the fault of the

antiquary than of the student of other sciences. It is his misfortune that his most recondite pursuits are peculiarly exposed to the laborious idling of the mere dabblers in science, so that they alternately assume to the uninterested observer the aspect of frivolous pastime and of solemn trifling. I cannot but think that a direct union with the associated sciences, and an incorporation especially with the kindred researches of the ethnologist, while it might, perchance, give some of its present admirers a distaste for the severer and more restricted study, would largely contribute to its real advancement, and free its truly zealous students from many popular trammels which at present cumber its progress. Meanwhile the archæologist may derive some hope from the remembrance that astronomy was once astrology; that chemistry was long mere alchemy; that geology has only in our own day ceased to be a branch of unreasoning antiquarianism; and that ethnology has scarcely yet passed the jealously guarded porch, as the youngest of all the recognised band of sister sciences.

In nothing is the want of the intelligent cooperation of kindred sciences which bear on the study of antiquities more apparent than in the present state of our public collections. The British Museum contains the elements of a collection which, arranged ethnographically and chronologically, would form the most valuable school of popular instruction that Government could establish; and no other country rests under the same manifest duty to form a complete ethnological museum as Britain: with her hundred colonies, and her tribes of subject aborigines in every quarter of the globe, losing their individuality where they escape extinction, by absorption and assimilation to their European masters. Were an entire quadrangular range of apartments in the British Museum devoted to a continuous systematic arrangement, the visitor should pass from the ethnographic rooms, shewing man as he is still found in the primitive savage state, and destitute of the metallurgic arts; thence to the relics of the Stone Period, not of Britain or Europe only, but also of

Asia, Africa, and America, including the remarkable primitive traces which even Egypt discloses. To this would then fitly succeed the old monuments of Egyptian civilisation, the Nimrud marbles, the sculptures of India, and all the other evidences of early Asiatic arts. The Archaic Greek and Colonial works should come after these, followed by the master-pieces of the age of Pericles, and these again by the monuments of imperial Rome. Thus by a natural sequence we return to British remains: the Anglo-Roman relics piecing on like a new chapter of European history, at the point where our island first appears as a part of the old Roman world, and followed in succession by our native Anglo-Saxon, Scandinavian, Norman, and Medieval antiquities. The materials for all this, if we except the primitive British relics, are already acquired; and while to the thousands who annually throng the Museum, in idle and profitless wonder, this would at once convert into intelligible history, what must now be to the vast majority of visitors a confused assortment of nearly meaningless relics, even the most profound scholar might derive from it information and pleasure, such as would amply repay the labour of re-arrangement. The immense practical value of collections to the archæologist renders their proper arrangement a matter of grave importance, and one which cannot be allowed to rest in its present extremely imperfect state.[1]

In Scotland no national collection exists, though a small body of zealous men have struggled to maintain an Archæological

[1] I should regret if I were thought, by the above remarks, to reflect on the present official staff of the British Museum, including as it does men no less distinguished for their learning than for their intelligent zeal for archæological investigation. One evil attendant on the present defective system of management of the Museum by a body of Trustees, composed, for the most part, of irresponsible *ex officio* members, is, that the Keepers are converted into mere custodiers, responsible for the safety of the collection, but altogether destitute of the powers of an efficient curatorship, such as in the hands of Councillor C. J. Thomsen of Copenhagen led to the development of the entire system which has given to Archæology the character of a science. Wherever the fault lies, however, it is indisputable that the departments of ethnography and antiquities, in the British Museum, are arranged almost without an attempt at systematic classification: one consequence of which is, that in nearly every town of any importance throughout the kingdom we see local museums established, containing a confused jumble of antiquities, natural history, and foreign curiosities, but without any single characteristic of a scientific collection. The present popular idea of a museum, in this country, dif-

Museum in the Scottish capital for the last seventy years, in defiance of obstacles of the most harassing nature. Not the least of these is the enforcement of the law of treasure-trove, by which all objects of the precious metals are held to be the property of the Crown. Notwithstanding the earnest zeal for the preservation of national relics which has actuated both Sir Henry Jardine and John Henderson, Esq., the late and present Crown and Lord Treasurer's Remembrancers for Scotland, and the liberal construction of the law by its administrators, as shewn in their offer of full value for all objects of the precious metals which may be delivered up to them, its operation has constantly impeded researches into the evidences of primitive art, and in many cases has occasioned the destruction of very valuable relics.

In a letter on this subject with which I have been favoured by the distinguished Danish antiquary, Mr. J. J. A. Worsaae, he remarks: "In Denmark, in former times, all hidden treasures, when found, belonged to the king. They were called *Danefa.* The finder had to give them up to the Crown without any remuneration. The effect of this was that very few or no antiquities of gold or silver were preserved for the Museum, [of Northern Antiquities at Copenhagen,] as the finders secretly sold the antiquities. For the purpose of putting an end to this, a law was passed in the middle of last century, in which the king declared himself willing to give the full value to the finders, and in some cases still more than the value; but, at the same time, he ordered all such things to be given up to the public museums, and in case of concealment the finders were to be tried and punished.

"This law is still in operation. It is the rule that *the finder*, in the strictest sense of the word, gets the remuneration, as the king—the real owner—has renounced his rights to him. The

fers, indeed, in no degree, from the estimate of an exhibition of giants and dwarfs, or any other vulgar show; nor is this grave error likely to be discarded till the great model museum in London sets the example of a systematic arrangement, devised on some other principle than that of merely pleasing the eye.

owner of the soil only gets the value if he has ordered a servant expressly to dig for any such thing, or, of course, if he is the finder himself. This has proved most effective. Another measure which has secured a good many objects for the Museum is the payment of the finder *as soon as possible.* Poor people, as the finders generally are, do not like to wait for money. They get easily anxious, and prefer to sell the things for a smaller price, if they only get the money without delay. It has now come to this here, that very few antiquities of gold or silver are lost. The peasants and workmen are perfectly well aware that they get more for the things dug up, at the Museum in Copenhagen, than in the shop of a goldsmith. This has been effected by publication in the almanacs, newspapers, &c., of the payments given to finders of valuable antiquities."

Some of the wretched fruits of the different system still pursued in this country are referred to in the following pages;[1] yet with the earnest desire of the officers of the Scottish Exchequer, to whom the enforcement of the present law is committed, to avert, if possible, the destructive consequences which it has heretofore operated to produce, it is manifest that nothing more is needed than to adopt the essential practical feature in the Danish plan, which gives the actual finder the sole claim to reward, and also holds him responsible and liable to punishment. Until this indispensable change is effected, the Scottish archæologist must continue to deplore the annual destruction of national treasures, not less valuable to the historian than the chartularies which are being rescued with so much labour and cost from their long-neglected repositories.

[1] One instance, though by no means a solitary one in my own experience, will suffice to shew the pernicious effects of this antiquated relic of feudal claims, even in impeding research. Some considerable space is devoted, in the last section of this volume, to Runic relics; but one of considerable interest is omitted to be noticed,—a bronze finger ring inscribed in Anglo-Saxon Runes with the word *Æikhi*, (?) probably the name of the original owner. It was found in the Abbey Park, St. Andrews. But its possessor, a gentleman of considerable antiquarian zeal, refused to permit of its being engraved or more distinctly referred to here, on the sole ground of his apprehension of exposing himself thereby to the claims of the Crown.

In attempting to arrange the elements of a system of Scottish Archæology, as a means towards the elucidation of prehistoric annals, I have had frequently to regret the want of any national collection adequate to the object in view. That the Museum of the Society of Antiquaries of Scotland is one of considerable value must I think be apparent, even from the materials it has furnished for this volume. Some private collections, it will be seen, add a few more to the rescued waifs of Scottish national antiquities; but the result of an extensive correspondence carried on with a view to obtain the necessary facts which no books at present supply, has forced on me the conviction that, even within the last dozen years, such a number of valuable objects have been destroyed as would alone have formed an important nucleus for a complete Archæological Museum. The new Statistical Accounts, along with some periodicals and other recently published works, contain references to discoveries made within that period in nearly every district of Scotland. From these I selected upwards of two hundred of the most interesting and valuable examples, and the result of a laborious correspondence is, the establishment of the fact that scarcely five per cent. of the whole can now be ascertained to be in existence. Some have been lost or broken; some thrown away, sold, or stolen,—which in the case of objects of the precious metals involves their absolute destruction; in other cases, the proprietors themselves have disappeared—gone to India, America, Australia, or no one knows where. Of the few that remain, the jealous fear which the operation of the present law of treasure-trove excites has rendered a portion inaccessible, so that a sufficiently meagre handful of so prominent a harvest was left to be reaped.

When it is considered that in Scotland we have no such treasuries of the facts on which an archæological system must be built, as the Archæologia, the Vetusta Monumenta, the Nenia Britannica, the Ancient Wiltshire, and a host of other works supply to the English antiquary, I have a right to expect that some forbearance be shewn in contrasting this first attempt

at a comprehensive treatment of the subject, with the works which other countries possess. I do not desire to offer it to the reader with an apology, or to seek to deprecate criticism by setting forth in array a host of difficulties surmounted or succumbed to. It has been the work of such leisure time as could be snatched from less congenial but engrossing pursuits, and will probably be found to contain some recurrence to the same ideas, to which a writer is liable when only able to take up his theme at intervals, and to pursue it amid repeated interruptions. Nevertheless, I have aimed at treating the subject as one which I esteem a worthy one ought to be treated, and if unsuccessful, it is not for want of the zeal which earnest enthusiasm commands. Some new ground I believe has been broken in the search after truth, and as a pioneer I am fully prepared to see my footsteps erased by those who follow me. It will be found, however, that truth is the goal which has been aimed at; and if it be but as a glimmering that light appears, it is well, so that its streaks are in the east, and the clouds which begin to break make way before the dawn.

It only remains for me to acknowledge some of the many favours received in the progress of the Work; though it is impossible to mention all to whose liberality I have been indebted during the extensive correspondence into which I was led while collecting needful materials for substantiating the positions assumed in the following argument. The want of such resources as in other countries supply to the Archæologist the means of constructing a system based on trustworthy evidence, has compelled me to draw largely on the courtesy of private collectors; and with very few exceptions, the cordial response returned to my applications has rendered the otherwise irksome task a source of pleasure, and even in some cases the beginning of valued friendships.

The Council of the Society of Antiquaries of Scotland have afforded the utmost facilities in regard to their important national collection, and have accorded to me an equal freedom

in the use of the extensive correspondence preserved in their Library, from which it will be found that some curious information has been recovered, not otherwise attainable. From my fellow Associates in the Society I have also received the most hearty sympathy and cooperation. To the kind services of Sir James Ramsay, Bart., I am indebted for obtaining from Lady Menzies one of the beautiful gold relics figured in the work. To my friend Professor J. Y. Simpson, M.D., I owe the contribution of one of the illustrations, and to Albert Way, Esq., and George Seton, Esq., others of the woodcuts, presented to me as the expression of their interest in my labours; while I have to thank my friend James Drummond, Esq., A.R.S.A., for drawings from his faithful pencil of several of the examples of ancient Scottish arms, as well as of other relics figured in the work. The many obligations I owe to the freedom with which Charles Kirkpatrick Sharpe, Esq., has long permitted me to avail myself of the treasures of his extensive collection, will appear in some degree from the use made of them in the following pages; while John Bell, Esq. of Dungannon, has obviated the difficulties which would have prevented my turning his no less valuable archæological treasures to account, by forwarding to me drawings and descriptions, from which some portions of this work derive their chief interest. Others of the objects selected for illustration are from the collection of W. B. Johnstone, Esq., R.S.A., the whole rare and costly contents of which have been placed completely at my disposal.

Nor must I omit to acknowledge the kind assistance I have received in various ways from David Laing, Esq., William B. D. D. Turnbull, Esq., W. H. Fotheringham, Esq., the Rev. James Mather, J. M. Mitchell, Esq., William Marshall, Esq., as well as from other Fellows of the Society of Antiquaries of Scotland.

The Council of the Archæological Institute, with a liberality altogether spontaneous, offered, in the most gratifying and flattering terms of cordial sympathy with the object of my work,

the beautiful series of engravings of the Norrie's Law silver relics, which illustrate the account of that remarkable discovery.

The Council of the British Archæological Association have placed me under similar obligations in regard to the woodcuts which illustrate the sepulchral discoveries at Pier-o-waal in Orkney.

To Sir George Clerk, Bart., I owe the privilege of access to the valuable and highly interesting collection of British and Roman antiquities at Penicuick House, formed by the eminent Scottish antiquary Sir John Clerk.

The very great obligations I am under to Lieutenant F. W. L. Thomas, R.N., are repeatedly noticed in the following pages, though in no degree adequately to the generosity with which the knowledge acquired by him during his professional exploration of the Orkney Islands, while engaged in the Admiralty Survey, has been placed at my disposal.

I have also to acknowledge the contribution of valuable information from my friend Professor Munch of Christiania, and from George Petrie, Esq. of Kirkwall; as well as kind services rendered me in various ways by Charles Roach Smith, Esq., J. C. Brown, Esq., William Nelson, Esq., by my indefatigable friend and correspondent, John Buchanan, Esq. of Glasgow, and others referred to in the course of the work.

My special thanks are due to Robert Hunter, of Hunterston, Esq., for his courteous liberality in forwarding to me the valuable Scottish relic found on his estate—engraved as the frontispiece to this volume—after I had despaired of making anything of its remarkable Runic inscription from various copies obligingly furnished. Whatever opinion may be formed as to the value of the interpretation of its inscription offered here, the archæologist and philologist may both place the utmost reliance on the fidelity of the engraved fac-simile of this interesting monument of the palæography, and, as I believe also, of the language of our ancestors. Besides putting into the engraver's hands a carefully executed drawing, he had the advantage of having the

brooch itself before him while engraving it; after which I went over the copy in his presence, comparing it letter by letter, and checking the minutest deviations from the original. It is justly remarked in the "Guide to Northern Archæology," that "in copying Runic inscriptions great accuracy is required; for a point, a small, scarcely perceptible line, changes the value of the letter, or occasionally adds a letter, which may easily escape notice." When, however, it is added that "one of the best helps in copying Runic, and indeed all other inscriptions, is a knowledge of the language in which they are written," I am inclined to question its strict justice. Most authors, I believe, who have had any experience of the matter, would much prefer a compositor entirely ignorant of the language for setting up Latin, or any foreign tongue, at least to one short of being a perfect master of it. Where there is the total absence of knowledge of it, the imagination is entirely at rest; and the patient copying of letter after letter ensures the accuracy which often surprises the young author when revising his first proofs. Even so I would, in most cases, place more faith in the version of an inscription by an engraver accustomed to accurate copying, though entirely ignorant of the language, than in that of the ablest philologist, with his head full of speculations as to its meaning. A direct example in point is found in the Cardonell or "Thorkelin" print of the Ruthwell inscriptions, where the Scottish antiquary has given a more faithful version of the Runic than of the Latin legends. Notwithstanding the extravagant flights which Professor Finn Magnusen permitted his imagination to take relative to the supposed personages named on the Hunterston brooch, little blame can attach to him for having missed its true meaning with nothing but imperfect copies to guide him; but the fact that this inscription should have been copied from the original brooch by two Scandinavian scholars familiar with the Runic alphabet, without either of them detecting the name *Maolfridi*, so palpably engraved on it, proves how completely, though unconsciously, they were blinded

by their knowledge of the old Norse language, and their belief that it must contain the word *Dalkr*, a brooch. The recognition, indeed, of this proper name proved to me the key to the whole inscription, as it immediately suggested the probability of the ᚴᚠ of former translators in the first line being also an ᛘ, and so led to a new and intelligible reading of the remainder. The word *dìol*, which I have rendered according to its significance as a substantive, is also employed as the verb *to avenge*. One Gaelic scholar to whom I shewed the inscription, accordingly suggested as a more characteristic old Celtic interpretation of the Runes: *O Malbritha, thou friend, avenge Malfridi!* "The difference," he adds, "between the ancient and modern orthography is not greater than frequently exists between the present spelling of familiar terms, as written or pronounced in two contiguous Highland districts."

It is a customary conclusion to a preface to crave the forbearance of the reader for all faults and shortcomings: the which, as readers and critics make an equally general custom of paying no attention to it, may as well be omitted. I can only say, that while writing this work with an honest and earnest desire for the discovery of truth, I have done it no less under the conviction that anything I could now set forth on the subject must be modified by more extended observations, and superseded, ere long, by works of a more complete character.

EDINBURGH, *January* 1851.

Lightward aspire : nor think the utmost height
Of an attainable success is won ;
Nor even that the mighty spirits, gone
With the bright past, in their enduring flight
So won their passage toward the infinite,
That they may stand on their far heights alone,
A distant glory, dazzling to the sight,
In which all hope of mastery is o'erthrown.
No height of daring is so high, but higher
The earnest soul may yet find grace to climb ;
Truth springeth out of truth ; the loftiest flyer,
That soareth on the sweep of thought sublime,
Resteth at length ; and still beyond doth guess
Truth infinite as God toward which to press.

SCOTTISH ARCHÆOLOGY.

INTRODUCTION.

"Large are the treasures of oblivion. Much more is buried in silence than recorded; and the largest volumes are but epitomes of what hath been. The account of Time began with night, and darkness still attendeth it."—Sir Thomas Browne.

History which is derived from written materials must necessarily begin only where civilisation has advanced to so ripe a state, that the songs of the bard, and the traditions of the priest, have ceased to satisfy the cravings of the human mind for mastery over the past and the future. It has been too generally assumed that history is an inconceivable thing independent of written materials. Historians have accordingly, with a transient and incredulous glance at the fabulous infancy of nations, been too frequently content to leave their annals imperfect and maimed of those chapters that should record the deeply interesting story of their origin and rise. This mode of dealing with history is happily no longer sanctioned by the example of the ablest of its modern investigators. They are at length learning to analyze the myths which their predecessors rejected; and the results have already rewarded their toil, though much still remains obscure, or utterly unknown.

Gifted with an inspired pen, Moses has recorded in briefest words the story of the world's infancy: that, therefore, is rendered independent of myth or fable. But quitting that single illuminated spot, how shall the investigator recover the annals of our race during the dubious interval between the era of the dispersion of the human

family and the earliest contribution of written materials? Job, we know, was no Hebrew, but a man of Uz, in the land to which Edom succeeded. Could we fix his era, it would be of interest; for we know that he lived in a literate age; and his desire against his adversary was, *that he had written a Book!* But Biblical students are disagreed as to this epoch. A recent German critic brings it down to the period of the Exodus, while the great majority of commentators have heretofore placed it some 700 years nearer Creation. We must, meanwhile, be content to receive this as one pregnant scene of primitive social life incorporated into the Book of Books, while all the rest are swallowed up with the old centuries to which they belonged. It has to be intercalated as best may be, into its place in the first chapters of human history, ere we grope our way onward or backward, seeking amid the darkness for that historic oasis—the first establishment of the human race on the banks of the Nile.

Wilkinson places the era of Menes, the founder of Egyptian monarchy, and probably one of the earliest wanderers from the eastern cradle of our race, some 2200 years B.C. Bunsen, aiming, in his "Ægyptens Stelle in der Weltgeschichte," at fixing the exact year, assigns that of 3643 B.C., or, in other words, 1295 years before the commonly accepted era of the Deluge. Yet even this has not satisfied all the requisites of newly discovered data. Fleury, in his "L'Egypte Pharaonique," carries back the Menean age some 1600 years farther into the past; and Böckh, following out an independent series of investigations, fixes the same era, in his "Manetho und die Hundssternperiode," for the year B.C. 5702. The world's early historic chronology, it is now universally admitted, has been misinterpreted. The last date is just 1698 years before the creation of the world, if we are still implicitly to accept Archbishop Usher for our guide. But even this it is possible may yet be revised, as too scanty for the events which it must comprehend; unless, following the example of one distinguished archæologist, Mr. S. Sharpe, we consign all Egyptian history prior to the era of Osirtesen I. to the same order of fabulous or mythic inventions as the crude traditions of our own chroniclers, and esteem Menes as no more than the classic Saturnus, or the Scandinavian Odin. It is not our province here to do more than indicate the fact, that all early chronology is liable to correction by the contributions of new truths, its most accredited data being at best only approximations to the desired end. "Oblivion is not to be hired. The greater

part must be content to be as though they had not been: to be found in the register of God, not in the records of men. Twenty-seven names make up the first story before the Flood, and the recorded names ever since contain not one living century. The number of the dead long exceedeth all that shall live. The night of time far surpasseth the day; and who knows when was the Equinox?"[1]

Similar necessities and difficulties meet us when we would investigate the beginnings of younger nations. The oldest intelligible inscription known in Scotland is that graven in Anglo-Saxon Runes on the Ruthwell Cross, Dumfriesshire, and dating not earlier than the ninth century. The oldest written historic documents are probably the charters of Duncan, engrossed about the year 1035, and still preserved among the muniments of Durham Cathedral. Prior to these the Romans furnish some few scanty notes concerning the barbarian Picti. The Irish annalists contribute brief but valuable additions. The northern sagas, it is now certain, contain a still richer store of early historic notes, which the antiquaries of Copenhagen are busily digesting for us into available materials. Yet, after all these are ransacked, what shall we make of the long era which intervenes between the dispersion of the human family and the peopling of the British Isles? When did the first rude prow touch our shores?—who were its daring crew? Whence did language, manners, nationality, civilisation, and letters spring? All these are questions of the deepest interest; but on nearly all of them history is as silent as on the annals of Chaos. With reverential piety, or with restless inquisitiveness, we seek to know somewhat of the rude forefathers of our island race. Nor need we despair of unveiling somewhat of the mystery of their remote era, though no undeciphered hieroglyphics, nor written materials, preserve one solitary record of the MENES of the British Isles.

Human intelligence and research have already accomplished so much, that ignorance alone can presume to resign any past event to utter oblivion. Between "*the Beginning,*" spoken of in the first verse of the Book called Genesis, and the creation of man, the most humble and devout of Biblical students now acknowledge the intervention of ages, compared to which the whole era of our race is but as the progression of the shadow one degree on the dial of time. Our whole written materials concerning all these ages are comprehended in the few introductory words of the Mosaic narrative, and for well-nigh

[1] Sir Thomas Browne. Hydriotaphia, or Urn Burial.

6000 years no more was known. But all the while their history lay in legible characters around these generations who heeded them not, or read them wrong. At length this history is being deciphered. The geologist has mastered the characters, and page after page of the old interleaved annals of pre-adamite existence are being reduced to our *enchorial text*—to the writing of the people. The dislocated strata are being paged, as it were, and re-arranged in their primary order. The palimpsests are being noted, and their double readings transferred to their correct places in the revised history. The whole accumulations of these ages between Chaos and man are, in fact, being dealt with by modern science much in the same way as the bibliographer treats some monkish or collegiate library suddenly rescued from the dust and confusion of centuries.

Returning to the same book of Moses, called Genesis, we find in it another record of things since the Beginning, thus noted in a passing parenthesis of the sacred narrative: "And God made the stars also." Very brief words; yet these are all our written materials about worlds and suns so filling the azure vault, that the astronomer, scarcely conscious of using figurative language, speaks of nebulous spaces as *powdered with stars*. Science has added somewhat to our knowledge of these also, without written annals. The Chaldean shepherds, who had never travelled beyond the central plain of Asia, where we recognise the cradle-land of the human race, began the work of unriddling these mysterious records. Copernicus, Tycho Brahe, and Kepler, added largely, with unassisted vision, to the accumulated observations of astronomy. Galileo supplied a new key that unlocked many secret stores. Huygens, Newton, Herschel, Dollond, Lord Rosse, have each given us others wherewith many more are being opened. Astronomy and geology have both accomplished much, and have yet to accomplish far more ere their scattered leaves can be bound up, or their thousand lacunæ filled in. Nevertheless, histories, it seems, may be based on other than written materials—may, indeed, be all the more sure and incontrovertible because their evidence is traceable to no such doubtful records.

It is in curious consistency with human nature that we find the order of its investigations in the inverse ratio of their relation to itself. In the infancy of our race men studied the stars, bringing to the aid of their human sympathies the fancies of the astrologer to fill the void which Astronomy could not satisfy. The earth had grown older,

and its patriarchal age was long past, when Cosmogony and Geology had their rise. Now at length when the studies of many generations have furnished materials for Astronomy, and the history of the earth's crust is being patiently unravelled by numerous independent labourers, some students of the past have inquired if the annals of our own race may not also be recoverable. Men with zeal no less earnest than that which has done so much for Astronomy and Geology, have found that this also lay around the older generations, recorded in characters no less intelligible, and containing the history of beings no less interesting to us than the Saurians or Mammoths, to whose inheritance we have succeeded. Bacon has remarked, in treating of the vicissitudes of things,[1] "The great winding-sheets that bury all things in oblivion, are two—deluges and earthquakes." But the weft of our historic winding-sheet is of a feebler texture, and its unnoted folds envelop an ampler oblivion, which also will yield secrets worth the knowing. Not a day passes that some fact is not stored in that strange treasury, some of them wittingly, but far more unwittingly, as the chronicles of man. To decipher these and to apply them as the elements of a new historic chronometry, are the legitimate ends of Archæology.

Slowly and grudgingly is its true position conceded to the study of the archæologist. The world has had its laugh at him, not always without reason. The antiquary, indeed, in our own day, has taken the first of the laugh himself, feeling that it was not unmerited, so long as he was the mere gatherer of shreds from the tattered and waste leaves of the past. Now, however, when these same shreds are being pieced together and read anew, it is found that they well repay the labours both of collector and decipherer. But Archæology is yet in its infancy. Little more has been done for it than to accumulate and classify a few isolated facts. We are indeed only learning the meaning of the several characters in which its records are engrossed.

The history of one of the oldest and most faithfully studied branches of the science, may afford an example, as well as encouraging assurance, for the whole. In 1636 the learned Jesuit, Father Kirchner, published his "Œdipus Ægyptiacus," a ponderous treatise on Egyptian hieroglyphics, completed in six folios, containing abundance of learning, and no lack of confident assurance, but never a word of truth in the whole. It is a fair specimen of the labours of hieroglyphic students down to the year 1799, when M. Bouchard, a French officer of

[1] Bacon's Essays, LVIII.

Engineers, in digging the foundation of Fort St. Julien, on the western bank of the Nile, between Rosetta and the sea, discovered a mutilated block of black basalt, containing three versions of one inscription graven in the year B.C. 196, or 1995 years prior to its discovery. Inscribed in this late era of hieroglyphic literature, Epiphanes, whose accession it records, had decreed it to be graven not only in the hieroglyphic or sacred characters, but also in the enchorial or popular Egyptian writing, and in the Greek character and language. Here then seemed to be the long-coveted key to the mysterious records of Egypt. Casts of it were taken, fac-similes engraved and distributed throughout Europe; and expectation, roused to the utmost pitch of excitement, paused for a reply. But eighteen years elapsed before Dr. Thomas Young, one of the greatest scholars of his age, mastered the riddle of the key, established beyond doubt the alphabetic use of hieroglyphics, and demonstrated the phonetic value of five of its characters. It seems, perhaps, a small result for so long a period of study, during which the attention of many of the first scholars of Europe had been directed to the critical investigation of the inscriptions of the Rosetta stone, and the comparison of their diverse characters. Nevertheless it was the insertion of the point of the wedge. All that followed was easy in comparison with it. What has since been accomplished by the scholars of Europe in this old field of archæological investigation, where they dealt with written though unread materials, is now being attempted for the whole compass of its legitimate operations by a similar union of learning and zeal, and Archæology at length claims its just rank among the inductive sciences.

The visitor to the British Museum passes through galleries containing fossil relics of the secondary and tertiary geological periods—the gigantic evidences of former life, the tropical fauna of the carboniferous system, and all the organic and inorganic proofs by which we are guided in investigating the physical changes, and classifying the extinct beings, that pertained to the older world of which they speak. Thence he proceeds to galleries filled with the inscribed sarcophagi and obelisks, the votive tablets, the sculptured altars, deities, or historic decorations of Assyria, Egypt, India, Greece, and Rome, relics which belong no less to extinct, though newer systems and orders of being. "The antiquities," says an eminent geologist, when instituting a nearly similar comparison, "piece on in natural sequence to the geology; and it seems but rational to indulge in the same sort of

reasonings regarding them. They are the fossils of an extinct order of things newer than the tertiary; of an extinct race, of an extinct religion, of a state of society and a class of enterprises which the world saw once, but which it will never see again; and with but little assistance from the direct testimony of history, one has to grope one's way along this comparatively modern formation, guided chiefly, as in the more ancient deposits, by the clue of circumstantial evidence."[1] Such are the reflections of an intelligent geologist, suggested by a similar combination of geological and historic relics to that which offers itself to the visitor of our great National Museum. But it is even in a more absolute sense than the geologist dreams of that the antiquities piece on to the geology, and show the researches of the archæologist to follow up the closing data of the older systems without a pause. He labours to build up that most important of all the branches of palæontology which pertains to ethnological investigations, and which when brought to maturity will be found not less valuable as an element in the elucidation of the history of nations and of mankind, than the grammatical construction and the affiliations of languages, which the ethnologist now chiefly favours. The archæologist applies to the accumulated facts of his own science the same process of inductive reasoning which the geologist has already employed with such success in investigating still earlier states of being. Both deal with unwritten history, and aim at the recovery of annals long deemed irretrievably erased. Nor is it merely in a parallelism of process, or a continuity of subject, that the affinity is traceable between them. It will be found that they meet on common ground, and dispute the heirship of some of old Time's bequests. The detritus records archæological as well as geological facts. The more recent alluvial strata are the legitimate property of both; while above these lie the evidences of still later changes on the earth's surface—the debris of successive ages, the buried ruins, the entombed works of art, and "the heaps of reedy clay, into which chambered cities melt in their mortality"[2]—the undisputed heirlooms of the archæologist. The younger science treats, it is true, of recent periods, when compared with the eras of geological computation, and of a race newer than any of those whose organic remains are classified in the systems into which the strata of the earth's crust have been grouped. But this race which

[1] Hugh Miller's First Impressions of England and its People.

[2] Ruskin's Seven Lamps of Architecture, p. 66.

last of all has peopled the globe, once teeming with living beings so strangely diverse from all that now inhabit it, is the race of man, whose history embraces nobler records, and has claims to a deeper interest for us than the most wonderful of all the extinct monsters that once

> "Prone on the flood, extended long and large,
> Lay floating many a rood."

Among the recent contributors to archæological science, the Danish antiquaries have surpassed all others in the value and extent of their researches. Occupying as they do a comparatively isolated seat of early northern civilisation, where the relics of the primeval and secondary archæological periods escaped to a great extent the disturbing influences of Roman invasion, they possess many facilities for its study. Notwithstanding this, however, the mute but eloquent relics of antiquity which abound there, excited, until a very recent period, even less notice than they have done among the archæologists of Ireland and Scotland, where also aboriginal traces have been little modified by the invading legions, whose memorials nearly superseded all others in the southern part of the British Isle. The Scandinavian countries, Denmark, Sweden, and Norway, held the chief power among the races of the remote north in early times. Rome scarcely interfered with their growing strength, and left their wild mythology and poetic traditions and myths untinctured by the artificial creed which grew up amid the luxurious scepticism of the conquerors of the world. When the flood-tide of the legionary invaders had given back, and left the scenes of their brief occupation like the waste lands of a forsaken shore, the Scandinavians were the first to step into their deserted conquests. Fearlessly navigating seas where no Roman galley dared to have sailed, the Scandinavian warriors conquered the coasts of the Baltic and the German Ocean, occupied many parts of the British Isles, and especially established permanent settlements in the north of Scotland, and the isles on its northern and western coasts. Their power was felt on the shores of France and Spain, and they retaliated even on Italy the unavenged wrongs of the north. America was visited and partially occupied by them fully three centuries before Columbus steered his venturous course across the Atlantic. Greenland was colonized by them, and Iceland became the central point in their system of maritime operations. In that remote island the old northern language still lives, dialects of which were anciently spoken among

the Scandinavian races, including the Anglo-Saxons of the south, and the Norsemen of the Scottish mainland and the Northern Isles.

Enduring traces of these hardy colonists still remain to furnish evidence of the source of much of our national character and hereditary customs. The religion of the Angles, the Saxons, the Scottish Norsemen, the Danish, Norwegian, and Swedish Scandinavians, was similar. Christianity, which supplanted so much else, could not root out the memorials of their wild creed, which preserve in the names of the days of the week those of Tyr, Woden, Thur, and Frea, favourite deities of the Scandinavian mythology. In Iceland a large portion of the literature of this northern race still survives, in the form of mythic songs, sagas, laws, and other historic treasures. To this the attention of Danish and Norwegian antiquaries is now devoted with untiring enthusiasm, and already we are possessed of some of its fruits. These are of immense value to all the nations allied to the common stock, and among them Scotland ranks more directly than any other portion of the British Isles. The promised contribution by the antiquaries of Copenhagen to the written materials of history, of the "Antiquitates Britannicæ et Hibernicæ," cannot fail to add a historic era to early Scottish annals, richer in suggestive interest even than the romantic chronicles of the long lost "Vinland," by which, in their "Antiquitates Americanæ," they have added three centuries to the history of the new world.

A mingled race now occupies Britain, diverse in name, and still distinct in blood. The names of England and Scotland, however, contradict the character of the races. While the natives of the South retain the name of Angul, the father of the Scandinavian colonists, long since nearly superseded by Germano-Teutonic races, the Celtic Highlanders, and the Lowlanders of the North, alike take that of the Irish Scoti, the conquerors of the older Celtæ; though there is not wanting evidence to show, that the peculiar characteristics of the hardy Lowland race, including those of the whole north-eastern mainland, and the Northern Isles, are chiefly derived from the mingled Norse and Saxon blood of a Teutonic ancestry. But older races than the Scandinavian Vikings were colonists of the British Isles. Christianity has failed to obliterate the traces of the creed of Woden. Still less influential have been the modifications of Teutonic and Scandinavian dialects in supplanting the older Celtic names which cling to every hill, valley, and stream, though the Celtic race has, for nearly

eight centuries, ceased to occupy aught but the north-western Highlands of Wales and Scotland. The ethnologist has yet to solve the problem as to whether there exist not among these traces of still older tongues, pertaining to races who have left other but no less certain memorials of their former presence. From the remotest era to which historical tradition points, the Celtæ are found in possession of the north-west of Europe, whither they appear to have been gradually driven, by successive migrations of younger races from the same eastern centre, to which we refer the origin of the whole human family. We can trace, by unmistakable indications, the gradual western migration of this people, until we find them hemmed in between the younger races and the sea, on the north-west coasts of France, and along the mountainous regions of the west in the British Isles, where the invaders of the more fertile regions of the low countries have not cared to follow them. Modern philologists discover a clear affinity between the Celtic dialects and the languages known by the general title of Indo-European, affording confirmation of that eastern origin assigned to them, both by tradition and history, but which is no less true of the newer races which supplanted them. The essential differences between these remain markedly distinguishable after centuries of peaceful intercourse, and a common interchange of rights and privileges. The Scottish Gael, though by no means to be now regarded as sprung from a pure Celtic stock, scarcely differs more widely in language than in moral and intellectual characteristics from the race that peoples the fertile Lowlands. Yet the names of the most remarkable Lowland localities prove their possession by a Celtic race, whom therefore we cannot doubt to have been the prior, if not the aboriginal, occupants of the soil.

Of late years the direct evidence of the character of the primitive races of Europe, furnished by their sepulchral remains, has been made the subject of careful investigation by distinguished ethnologists, both of Denmark and Sweden. Eschricht, Nillson, and Retzius, have all aimed by this means to recover the traces of the colonists of the north of Europe, and have discovered different physical types, apparently corresponding to the successive stages of advancement in civilisation, which the more direct archæological evidence establishes. Arguing from these results, Professor Nillson arrives at the conclusion that the northern relics of the Stone Period are not the memorials of the Celtæ, but of a much older and unknown race, which in the course of time

has disappeared before the immigration of more powerful nations. Similar ideas are now generally gaining ground among ethnologists. "Within their own pale," Dr. Latham remarks, "the Celts were the encroaching family of the oldest, the Romans of the next oldest, and the Anglo-Saxons and Slavonians of the recent periods of history."[1] On like grounds to those by which Professor Nillson arrives at the conclusion that the Celtæ were preceded in the north by other races, Danish and Swedish ethnologists concur in rejecting the idea of the Fins having been the aboriginal race of Scandinavia. The earliest people, whose remains are found accompanied with the primitive class of implements, prior to the introduction of metals, appear to have belonged to a family of different physical character from those of any of the Arian races, and have been supposed to present features of greater affinity to the nations of Northern Asia. Professor Nillson, who has carefully examined the skeletons of the aboriginal Swedish colonists, and especially noted the conformation of their crania, states that they are readily distinguished from all the subsequent inhabitants of Scandinavia. They present the same peculiar form of cranium which has been recognised as existing among several ancient peoples, such as the Iberians or Basques of the Pyrenees, the Lapps and Samoyedes, and the Pelasgi, some traces of whom are still found in Greece.[2] The last noted coincidence is of considerable interest, both from the ancient prevalence there of cyclopean architecture, and other traces of primitive arts of unknown antiquity, and also from its vicinity to the Asiatic centre of aboriginal emigration. Dr. Latham remarks, in reply to the question, "Is there reason to believe that any definite stock or division of our species has become either wholly extinct, or so incorporated as to be virtually beyond the recognition and analysis of the investigator? With the vast majority of the *so-called extinct* stocks, this is not the case; *e.g.*, it is not the case with the old Gauls of Gallia, who, though no longer extant, have extant congeners—the Welsh and Gaels. To an extinction of this kind among the better known historic nations of Europe and Asia, the nearest approach is to be found in the history of the Pelasgi."[3] It will be of no slight interest if we can trace the congeners of this ancient people among the extinct aborigines of the north of Europe.

[1] Natural History of the Varieties of Man, by Robert Gordon Latham, M.D., p. 528.

[2] British Association for the Advancement of Science, Report for 1837, p. 31.

[3] Natural History of Varieties of Man, by R. G. Latham, M.D., p. 553.

Two later races are supposed to have succeeded each other in Scandinavia prior to its colonization by the true Swea race, the first settlement of which in Scandinavia Professor Nillson assigns to a much more recent date than has been commonly supposed—probably some time in the sixth century. Mr. Worsaae justly remarks, in his "Primeval Antiquities of Denmark,"—"It is a vain error to assume that certain races must incontestably be the most ancient, because they are the first which are mentioned in the few and uncertain written records which we possess."[1] Unfortunately extremely little attention has been hitherto paid to the size and form of the crania found in British tumuli. Some few examples, however, have been preserved, and will furnish the elements of a brief inquiry into this interesting department of Physical Archæology, in a subsequent chapter. To this branch of evidence it is probable that much greater importance will be attached when it has been thoroughly investigated, since to it we may look, with considerable confidence, for a distinct reply to the inquiry, which other departments of archæological evidence suggest as to the existence of primitive races in Britain prior to the Celtæ. So far as our present limited data admit of general conclusions being drawn, we find traces of more than one race, differing greatly in physical characteristics from any of the successive colonists of Britain within the era of authentic history. Professor Nillson is of opinion that the type of the old Celtic cranium is intermediate to the true dolicho-kephalic and brachy-kephalic forms, a conclusion in which Dr. Thurnam and others concur. Such is not the form of cranium of either of the races of the Scottish tumuli, and in so far, therefore, as such forms may be assumed to be permanent, we are necessarily led to the conclusion, that in these we recover traces of the Allophylian pioneers of the human family in Britain.

The infancy of all written history is necessarily involved in fable. Long ere the scattered families have conjoined their patriarchal unions into tribes and clans, acknowledging some common chief, and submitting their differences to the rude legislation of the arch-priest or civil head of the commonwealth, treacherous tradition has converted the story of their birth into the wildest admixture of myth and legendary fable. To unravel the complicated skein, and recover the pure thread divested of all its extraneous acquisitions, is the impos-

[1] Primeval Antiquities of Denmark, by J. J. A. Worsaae, translated, and applied to the illustration of similar remains in England, by W. J. Thoms, F.S.A., &c., p. 133.

sible task of the historian. This period past—so momentous in the influence it exercises on all the years that follow—the historian finds himself among materials more manageable in some respects, though not always more trustworthy. He reaches the era of chronicles, records, and, still better, of diplomas, charters, deeds of gift, and the like honest documents, which being written with no thought of posterity by their compilers, are the only really trustworthy chronicles that posterity has inherited. This historic epoch of Scotland is involved in even more obscurity than that which clouds the dim and fabulous morning of most nations. We have indeed the few but invaluable allusions of Roman authors supplying important and generally trustworthy data. But it is only a momentary glimpse of sunshine. For the era succeeding we have little better than the perplexing admixture of traditions, facts, and pious legends of monkish chroniclers, furnished with a copiousness sufficiently characteristic of the contrast between the literary legionary of imperial Rome, and the cloistered soldier of her papal successor. Amid these dusty acres of parchment must we glean for older dynasties and monarchical pedigrees—not seldom tempted to abandon the weedy furrows in disgust or despair. It is with no lack of zeal or courage, however, that these soldiers of the Church have encountered the oblivious past into which we still peer with no less resolute inquisitiveness. Bede, Fordun, Wyntoun, Boece, and the other penmen of the cloisters who, more or less accurately, chronicled contemporary history, all contributed their quota to the thick mists of fable which obscure the earlier annals of the country. Wyntoun, the best of our Scottish chroniclers, following the example of other monkish historians, begins his work as near *the beginning* as may be, with a treatise on angels, before proceeding to "manny's fyrst creatoune!" In the sixth chapter he gets the length of "Ye Arke of Noe, and of the Spate," and after treating of *Ynde*, *Egype*, *Afryk*, and many other lands with an enviable and leisurely composure, he at length reaches the threshold of his legitimate subject, and glances, in the thirteenth chapter of his Scottish Chronicles, at "how Bretanne and Irlande lyis." This, however, is a mere passing notice; nor is it till after the dedication of many more successive chapters of his first five books to the general history of the world, that the author of the "Orygynale Cronykil of Scotland" quits his ample theme, and devotes himself exclusively to the professed object of his investigation, with only

such occasional deviations as might be expected from an ecclesiastical historian.

With such laborious chroniclers peering into the past, which lay fully five centuries nearer them than it does to us, there might seem little left for the men of this older generation to do. But unhappily the very best of monkish chroniclers must be consulted with caution even as contemporary historians, and scarcely at all as the recorders of what passed any length of time prior to their own day; their information being nearly as trustworthy in regard to Noah and his *spate*, as to the traditions of generations immediately preceding their own. Lord Hailes begins his annals with the accession of Malcolm Canmore, "because the history of Scotland previous to that period is involved in obscurity and fable." Tytler, with even less courage than Lord Hailes, commences only at the accession of Alexander the Third, "because it is at this period that our national annals become particularly interesting to the general reader."

Till recently, the never-failing apology for all obscurities and deficiencies in Scottish history, has been the rape of our muniments by Edward and Cromwell. The former spoliation supplied for some centuries an excuse for all degrees of ignorance, inconsistencies, or palpable blunders; and the latter came most conveniently to hand for more recent dalliers in the same pleasant field of historic rambling. Edward and Cromwell both contributed a helping hand to the obscurity of Scottish history, in so far as they carried off and destroyed national records which could ill be spared. The apology, however, has been worth far more to maundering manufacturers of history than the lost muniments were ever likely to have proved. Not a few of these irrecoverable national records, so long deplored, it begins to be shrewdly suspected, never had any existence. Many more of them, it is found, were not sought for, or they might have been discovered to have never left their old repositories. Diligent Scottish antiquaries, finding this hereditary wail over lost muniments a very profitless task, have of late years betaken themselves to the study of what remained, and have been rewarded by the recovery of chest-loads of dusty charters and deeds of all sorts, of the twelfth, thirteenth, and fourteenth centuries, containing mines of historic information. The Scottish chartularies, now printed by various Clubs of literary antiquaries, disclose to us information scarcely open to a doubt, concerning old laws, feudal customs, servitude, tenure of

property, ecclesiastical corporate rights, the collision of lay and clerical interests, and the final transference of monastic lands to lay proprietors. The old apology, therefore, of muniments lost or destroyed, will no longer serve the Scottish historian. Imperfectly as these treasures have yet been turned to account, medieval history is no longer obscure. Many fallacies are already exploded, and many more must speedily follow. The legends of the old chroniclers must be tried by the tests of documents written sometimes by the same authors, but with no thought that history would ever question them for the truth.

Yet ample as is the field thus open to the literary antiquary, these will only partially satisfy earnest longings after a knowledge of the past, and a clue to the old ancestral chain whereof they are but the middle links. Ritson has already carried back the supposed limits of authentic Caledonian history fully a thousand years before the *obscurity* that daunted Lord Hailes: Chalmers, Gregory, Skene, and other zealous investigators, have followed or emulated him in the same bold inquiry. But neither do they reach the BEGINNING which we still desiderate. Much obscurity indeed vanishes. We begin to discover that the Northern and Southern Picts, so long the subject of mystery and fable, were no other than the aboriginal Celtæ; while the Scots who founded the kingdom of Dalriada, in Argyleshire, and ultimately conferred their name on the whole races occupying ancient Caledonia, were probably, if not indeed certainly, only another branch of the same Celtic race, who so readily amalgamated with the older occupants of Caledonia, that the change which is known as the "Scottish Conquest" long puzzled the historian, from the absence of any defined traces of a progress at all commensurate with its results. This is somewhat gained on the medieval *beginning* which could alone be previously held tenable. But this also begins in the wake of much progression, and glances at a period which likewise had its old history full of no less interest to us, could its annals be recovered.

In one of the few records of Sir Isaac Newton's reflections which he has left for the help of others, the following comprehensive thought occurs:—"It is clearly apparent that the inhabitants of this world are of a short date, seeing that all arts, as letters, ships, printing, needle, &c., were discovered within the memory of history." The reflection is surely a very pregnant one. The data it suggests to us as

the land-marks of time are well worth extending and turning to account, if so be that with their aid we can arrive at some trustworthy system of chronology, whereby to travel back towards that date which we reckon to be the beginning of things.

In this inquiry the labours of the literary antiquary, however zealously pursued, will but little avail us in reaching the desired point. The antiquary, nevertheless, has been long familiar with the elements of this older history, though turning them to very much the same profitable account as, till a very recent period, he did the hieroglyphic records graven on the granite tablets along the Nile. The first of arts mentioned by Newton is letters; justly first in point of dignity and universal value. Far homelier arts, however, sufficed the primitive races of mankind. Humble were their wants, and limited their desires; and if we are justified by the records of creation preserved to us in the Mosaic narrative, in assuming that man, beginning with the woven garment of fig-leaves and the coat of skins, has slowly progressed through successive stages to the knowledge of nobler arts, and the higher wants of an intelligent being, then we have only to establish evidence of the most primitive arts, pertaining to the primeval race, in order to be assured that we have reached the true beginning at which we aim. In the general investigation, indeed, allowance must be made for the speedy loss of antediluvian metallurgic arts which would follow almost of necessity on the exodus of the primitive nomades from their Eastern birthland, though preserved perhaps by the founders of the first Asiatic kingdoms, and probably practised by the earliest colonists of the Nile valley. Such at least we shall find to have been the case with the primeval colonists of Britain.

This point it is at which the modern archæologist now directs his inquiries, not altogether without the anticipation that these same primitive arts, the product of the beginning of things, may also prove to contain a decipherable alphabet, which may be resolved into definite phonetics, and furnish the key to many inscriptions no less curious and valuable than the parchments of medieval charter-chests, or even the tablet of Abydos and the Rosetta Stone.

It is long since the evidences of a primitive state of society, still abounding in the midst of modern civilisation, attracted the attention of the antiquary. It was indeed almost a necessary consequence of the accumulation of large collections of antiquities. The private

hoards of "nick nackets,"—including in general a miscellaneous assortment of relics of all ages, only sufficient to produce a confused notion of useless or obsolete arts, without creating a definite idea of any single era of the past,—may be aptly compared to the *disjecta membra* of some beautifully-proportioned and decorated vase. Hoarded apart, the pieces are nearly without value, and to new possessors become even meaningless. But should the whole, by some fortunate chance, be re-assembled in a single collection, it becomes possible for a skilful manipulator to piece the fragments together, and replace them with an elegant and valuable work of art. Thus it has proved with more than one archæological museum. In 1780 the Society of Antiquaries of Scotland was established, and its collection of national antiquities begun. A brief but most suggestive paper, read at one of its meetings in 1782, and published in the first volume of its Transactions, shews the speedy results of such valuable reconstructions, by means of an intelligent comparison of the primitive relics of Scotland.[1] But the resources of private zeal proved inadequate to the effective pursuit of these researches into Scottish Archæology, and the national funds found other, though not always more valuable objects for their expenditure. The hint was lost, but the accumulation of materials for future students was happily not altogether abandoned.

"About forty years ago," says J. J. A. Worsaae, the eminent Danish antiquary, writing in 1846, "the general character of scientific pursuits was in our country (Denmark) much the same as in most other parts of Europe. Great pains were spent in collecting all sorts of objects illustrating the changes of the globe upon which we live, and the distribution and habits of animals and plants—in short, all the departments of Natural History; whilst, strange to say, people for the most part neglected *traces of men*, the remains not only of their own ancestors, but also of all the different races who have been spread over the world. The antiquities, with the exception of those of Roman and Greek origin, were regarded as mere curiosities, without any scientific value."[2] Notwithstanding all the zeal of British archæologists of late years, so much of this spirit still remains among us, that it

[1] "An Inquiry into the Expedients used by the Scots before the Discovery of Metals," by W. C. Little, of Libberton, Esq. Archæologia Scotica, vol. i. p. 389.

[2] "The Antiquities of Ireland and Denmark; being the substance of two communications made to the Royal Irish Academy at its Meetings, Nov. 30, and Dec. 7, 1846."

would be easier, perhaps, even now, to secure the purchase by the Trustees of the British Museum, of a Roman statue or an Egyptian tablet, than of valuable relics of British antiquity.

One man has within the last thirty years accomplished, not for Denmark only, but for Europe, what the whole united labours of earlier archæologists failed to do. About the year 1815, the present Danish Councillor of State, C. J. Thomsen, the son of a merchant of Copenhagen, was appointed Secretary of a Royal Commission for the preservation and collection of national antiquities. It had then been in existence some seven or eight years, and the whole result of its labours was a few miscellaneous articles, unclassified and uncared for, lying in a small room of the University Library. His enthusiasm in the study of the antiquities of his country surmounted all obstacles. He had to contend alike with the theories of the scholar and the prejudices of the unlearned. But he had succeeded to a position of the utmost value to a man of energy and enthusiasm. From the first he had grants (though exceedingly small ones) of public money at his disposal. He soon enlisted the more important element of public sympathy, and nationality of feeling, in his pursuits. His little room became too small for accumulating purchases and donations. A suite of apartments was yielded, at his intercession, in the Royal Palace of Christiansborg; and as the varied collection increased in his hands, he found himself possessed at once of the space and the elements for systematic classification.

The Royal Museum of Northern Antiquities of Copenhagen now numbers between three and four thousand specimens of stone weapons and implements, some hundreds of bronze swords, celts, spear-heads, armillæ, torcs, &c., and a collection of native gold and silver relics unequalled in all the museums of Europe. To it we owe the valuable suggestion of the system of classification now universally adopted in the nomenclature of archæological science—the *Stone*, *Bronze*, and *Iron* periods, which, simple as it may appear, was first suggested by Mr. Thomsen, and is justly esteemed the foundation of Archæology as a science. By means of it the whole materials of antiquarian study at once arrange themselves according to an intelligible chronology of universal acceptance, and adapted in an especial degree to Northern antiquities. This, therefore, is the system on which the following data are arranged, subject only to such modifications as seem naturally to arise from national or local peculiarities.

It is not necessary here to enter on the question, of curious interest and value, as to whether the primeval state of man was essentially one of barbarism, from whence he progressed by slow degrees to social union, arts, civilisation, and political organisation into communities and nations. The investigations of chronologists the further they are pursued, seem only the more certainly to confer on primitive civilisation a more remote antiquity. At the same time, they confirm the idea, that the long accepted chronology of Archbishop Usher, still attached to our English Bibles, cheats the world, at the lowest computation, of fully 1400 years of its existence—a trifle perhaps in the age of worlds, but no unimportant element in the history of human civilisation, when we remember that between the era of the Mosaic deluge and the accession of the Egyptian Menes, we must account for the peopling of Egypt, the establishment of its social and political constitution, and the founding of a civilisation, the monuments of which are still among the most wonderful that human intellect and labour have produced. Not the least important branch of this inquiry relates to the primeval inhabitants of our own quarter of the globe; of whom as yet we know only with any degree of certainty of the Celtæ, occupying a transitional place in the history of the human family—at once the earliest known intruders and the latest nomades of Europe. It seems probable, from all the traces we can recover of the original condition of this race, that it was more their deficiency than their excess in the energy which we expect to find in the colonists of new regions, that drove them onward in their north-western pilgrimage, until their course was arrested by the Atlantic barriers. They seem to have fled ever forward, like night before the dawn, carrying with them knowledge sufficient to cope with the savage occupants of the wilds they invaded, yet bearing into these few arts but such as still pertain to the primitive races of mankind. In older literary notices of this people, whose language, manners, and arts are still traceable in our own land, we have only a secondary interest, believing that some records of them are recoverable, noted for us long before they had excited foreign interest. But, still more, we doubt not that similar records also preserve the history of older British tribes, in comparison with which the ancient Celtæ must be regarded as of recent origin. "The antiquities of the earlier periods," says a distinguished English antiquary, "including all remains which bear no evident stamp of Roman origin or influence, claim our most

careful investigation. Exceedingly limited in variety of types, these vestiges of the ancient inhabitants of Great Britain are not more interesting to the antiquarian collector on account of their rarity, than valuable to the historian. They supply the only positive evidence in those obscure ages, regarding customs, warfare, foreign invasions, or the influence of commerce, and the advance of civilisation amongst the earliest races by which these islands were peopled."[1] Perhaps when we have bestowed on these primitive remains the degree of careful investigation which they merit, we shall find the variety of types less limited than is now conceived to be the case. The archæologists of Denmark justly value the absence of all relics of Roman art and civilisation, from the confidence it has given to their researches into the true eras to which their own primeval antiquities belong. Such gratulations, however, can only be of temporary avail. The influence of Roman arts and arms furnishes an element in the civilisation of modern Europe too important not to be worthy of the most careful study. When the distinctive characteristics of Roman and primitive art have been so satisfactorily established as to admit of their separate classification without risk of error or confusion, the British collections, with their ample store of Anglo-Roman relics, will furnish a far more comprehensive demonstration of national history than those northern galleries, which must remain destitute of any native examples of an influence no less abundantly visible in their literature and arts, than in that of nations which received it directly from the source. In this respect the Scottish antiquary is peculiarly fortunate in the field of observation he occupies. While he possesses the legionary inscriptions, the sepulchral tablets, the sculptures, pottery, and other native products of Roman colonists or invaders, he has also an extensive and strictly defined field for the study of primitive antiquities, almost as perfectly free from the disturbing elements of foreign art as the most secluded regions of ancient Scandinavia.

[1] Albert Way, on "Ancient Armillæ of Gold."—Archæological Journal, vol. vi. p. 55.

PART I.

THE PRIMEVAL OR STONE PERIOD.

"Cum prorepserunt primis animalia terris,
Mutum et turpe pecus, glandem atque cubilia propter,
Unguibus et pugnis, dein fustibus, atque ita porro
Pugnabant armis, quæ post fabricaverat usus;
Donec verba, quibus voces sensusque notarent,
Nominaque invenere."

HORACE, *Sat.* I. 3.

CHAPTER I.—THE PRIMEVAL TRANSITION.

THE closing epoch of geology, which embraces the diluvial formations, is that in which archæology has its beginning. In a zoological point of view, it includes man and the existing races of animals, as well as the extinct races which appear to have been contemporaneous with indigenous species. Archæology also lays claim to the still more recent alluvium, with all its included relics pertaining to the historic period. Within the legitimate scope of this department of investigation are comprehended the entire evidence of changes on the geographical features of the country, on its coasts and harbours, its estuaries, rivers, and plains: all properly coming within the limits of Archæology, though too extensive to be embraced in the present review of its elements. This much, however, we learn from an examination of the detritus and its included fossils, that at the period immediately preceding the occupation of the British Islands by their first colonists

the country must have been almost entirely covered with forests, and overrun by numerous races of animals long since extinct. Much has been done in recent years to complete the history of British fossil mammalia; and though less attention has been paid to the question in which we are here most deeply interested, as to what portion of them are to be considered as having been contemporaneous with man, yet on this also some interesting light has been thrown. The most extensive discoveries of mammalian remains and recent shells generally occur along the valleys by which the present drainage of the country takes place, and hence we infer that little change has taken place in its physical conformation since their deposition. These, however, include the mammoth, elephant, rhinoceros, cave tiger, with other extinct species, and are referrible to the earlier portion of an epoch, with the close of which we have alone to deal. They belong to that period in which our planet was passing through its very latest stage of preparation prior to its occupation by man; a period on which the geologist, who deals with phenomena of the most gigantic character, and with epochs of vast duration, is apt to dwell with diminished interest, but which excites in the thoughtful mind a keener sympathy than all that preceded it. The general geographical disposition of the globe was then nearly as it still remains. Our own island was, during a great portion of it, insulated, as it is now. Yet it is of this familiar locality that the palæontologist remarks:—"In this island, anterior to the deposition of the drift, there was associated with the great extinct tiger, bear, and hyæna of the caves, in the destructive task of controlling the numbers of the richly developed order of the herbivorous mammalia, a feline animal, [the *Machairodus Latidens*,] as large as the tiger, and, to judge by its instruments of destruction, of greater ferocity."[1] It was within the epoch to which these strange mammals belong, and while some of them, and many other contemporaneous forms of being, still animated the scene, that man was introduced upon this stage of existence, and received dominion over every living thing.

It has been supposed by more than one intelligent naturalist, that the gigantic fossil elk (*Megaceros Hibernicus*) co-existed with the human race. Dr. Hart has produced what he conceived to be conclusive evidence on this subject, derived from the appearance of a rib, pierced with an oval opening near its lower edge, "with the mar-

[1] Owen's British Fossil Mammals, p 179.

gin depressed on the outer and raised on the inner surface, round which there is an irregular effusion of callus; in fact, such an effect as would be produced by the head of an arrow remaining in a wound after the shaft was broken off." This conclusion Professor Owen has disputed, apparently on satisfactory grounds.[1] By a similar line of argument, however, to which he has yielded his assent,[2] it has been shewn that the north of Europe was occupied by the human race at a time when the *Bos primigenius*, the *Bison priscus*, and the *Ursus spelæus*, existed.[3] Of the *Ursus spelæus*, or great cave bear, a skeleton is preserved in the museum of Lund, found in a peat-bog in Scania, under a gravel or stone deposit, and alongside of primitive implements of the chase. Though no such direct evidence has yet been observed here, similar conclusions have been arrived at. Mr. Owen, after referring the period of existence of the great cave bear to earlier geological epochs, adds, as the conclusion from present evidence, "that the genus surviving, or under a new specific form reappearing, after the epoch of the deposition and dispersion of those enormous, unstratified, superficial accumulations of marine and fresh-water shingle and gravel, called drift and diluvium, has been continued during the formation of vast fens and turbaries upon the present surface of the island, and until the multiplication and advancement of the human race introduced a new cause of extermination, under the powerful influence of which the Bear was finally swept away from the indigenous fauna of Great Britain."[4] To these native mammals may be added the horse, the roebuck, the red deer, the wild boar, the brown bear, the wolf, and the beaver, all of which have undoubtedly existed as wild animals in this country, and been gradually domesticated or extirpated by man.[5]

The most interesting of all the species for our present inquiry are those adapted for domestication, among which the *Bovidæ* occupy a prominent place. Of these, the great fossil ox (*Bos primigenius*) is very frequently found in Scotland. Dr. Fleming describes a skull of one in his possession measuring 27½ inches in length,[6] and a still larger one from Roxburghshire, now in the Scottish Antiquarian Museum,

[1] Owen's British Fossil Mammals, p. 462.

[2] Ibid. Introd. p. xxxiii.

[3] British Association for Advancement of Science, Report for 1847, p. 31; and Owen, Introd. p. xxxiii.

[4] Owen's British Fossil Mammals, p. 107. An interesting account of the discovery of antiquities of human remains in Kent's Hole, one of the most remarkable British ossiferous caves, is given in a subsequent chapter from the narrative of the Rev. J. M'Enery, F.G.S.

[5] Ibid. p. 197.

[6] History of British Animals, p. 24.

measures 28 inches in length. No evidence leads us to conclude that any attempt was made by the native Britons to domesticate either of the two kinds of gigantic oxen, the bison or great urus, which the Romans discovered on first penetrating into the north of Europe. But besides these there was also a smaller primitive wild species, the *Bos Longifrons,* of the domestication of which in Britain we have abundant proof, at least at the period of the Roman invasion. Soon after this it appears to have become extinct, so that we are rather led to assume that it may have been the domesticated ox of the native population prior to the intrusion of the Romans. Mr. Woods refers to the discovery of the skull and horns of the great urus in a tumulus on the Wiltshire Downs, along with bones of deer and boars, and fragments of native pottery, in proof of the existence in this country originally of a "very large race of *taurine* oxen, although most probably entirely destroyed by the aboriginal inhabitants before the invasion of Britain by Cæsar." Professor Owen has discussed the probable influence of Roman occupation on the wild herds and the breeds of domesticated oxen, with much sagacity, though somewhat too much influenced by the views so generally entertained of the barbarian state of the native Britons prior to the intrusion of Roman colonists.[1] Scarcely less interesting is the evidence which British fossil mammalia furnish of the existence of the horse among the native wild animals of the country, since we find proof, both in the early tumuli and the subterranean dwellings, not only of its domestication, but also of its being used for food.

This very slight glance at the most prominent indications of the primeval state of the country, will suffice to convey some idea of the circumstances under which the aboriginal colonists entered on the possession of the British Isles. Other portions of the same line of argument, derived from the fossil mammalia, and the circumstances under which they are discovered, will come under review in the course of our inquiries. The fossil Cetacea, especially, furnish most interesting and conclusive evidence of the very remote period at which the presence of a human population is discoverable in Scotland, while the beaver, (*Castor Europæus,*) which is frequently found in a fossil state, is also proved to have existed as a living species, both in Scotland and Wales, down to the twelfth century, and is even referred to so late as the fifteenth century. To the abundance of wild animals

[1] British Fossil Mammals, p. 500.

which continued to occupy the moors and forests of Scotland, long after the primitive states of society had entirely passed away, we shall also have occasion hereafter to refer. The same causes which exterminated the huge urus, the cave bear, and others of the largest and most intractable of the wild denizens of the British forests, ultimately led to the extinction of the greater number of those which either supplied objects of the chase, or were inimical to the social progress of man. Thus we observe, in the economy of nature, that one species after another disappears, to make way for newer occupants, until at length the last of those huge pre-adamite races of being give place, before the gradual advancement of man to assume possession of terrestrial dominion. Yet on this point also those questions in historic chronology, which tend to determine more precisely the lapse of centuries intervening between the Adamic creation and the earliest era of authentic history, exercise an important influence. Geology leaves no room for questioning the fact, that man did not enter upon this earth after some tremendous cosmical revolution, which made way for an entirely new race of beings, but that he was introduced as the lord of an inheritance already in possession of many inferior orders of creation. Contemporary with the most remarkable cave fossils are found the remains of many historic, or still existing species, and the precise line has yet to be drawn which shall determine how many of these were extinct, at the period when the Creator, at length satisfied with his inferior works, said, "Let us make man in our image, after our likeness." The remains, both of the large cave hyæna, (*Hyæna spelæa,*) and of the great cave tiger, (*Felis spelæa,*) occur not only in ossiferous caverns, but have also been found in superficial unstratified deposits. Considerable portions of the skeleton of the latter were discovered in 1829, along with remains of the mammoth, rhinoceros, ox, stag, and horse, in a marl-pit near North Cliff, Yorkshire. Under precisely similar geological circumstances the *Bos primigenius* has very frequently been brought to light in Scotland. It is of this animal that Sir R. I. Murchison remarks, in a letter to Professor Owen, descriptive of an example already referred to, found in a bog in Scania: "This urus is most remarkable in exhibiting a wound of the apophysis of the second dorsal vertebra, apparently inflicted by a javelin of one of the aborigines, the hole left by which was exactly fitted by Nillson with one of the ancient stone javelins..... This instrument fractured the bone, and

penetrated to the apophysis of the third dorsal vertebra, which is also injured. The fractured portions are so well cemented, that Nilsson thinks the animal probably lived two or three years after. The wound must have been inflicted over the horns, and the javelin must have been hurled with prodigious force." Of the existence, therefore, of the *Bos primigenius* within the historic epoch, we can entertain no doubt, and it is accordingly requisite to give full weight to the influence which its presence must have exercised on the general condition of our island. Professor Owen remarks, after showing the erroneous nature of the usually received opinion, that the lion, the tiger, and the jaguar, are peculiarly adapted to a tropical climate:—"A more influential, and, indeed, the chief cause or condition of the prevalence of the larger feline animals, in any given locality, is the abundance of the vegetable feeding animals in a state of nature, with the accompanying thickets or deserts unfrequented by man. The Indian tiger follows the herds of antelope and deer, in the lofty Himalayan chain, to the verge of perpetual snow. The same species also passes that great mountain barrier, and extends its ravages with the leopard, the panther, and the cheetah, into Bocharia, to the Altaic chain, and into Siberia, as far as the fiftieth degree of latitude; preying principally, according to Pallas, on the wild horses and asses."[1] No change, therefore, of climate, nor any remarkable geological revolution is needful to account for the disappearance of the huge British carnivora, the remains of which abound in the ossiferous caves. They pertain to the closing transition-period of the pre-adamite earth, and, as in other transition-periods which we shall have to consider, some traces of them survived among the inheritors of the new era. It is therefore a legitimate source of interest to the archæologist, to observe the mingling of extinct and familiar species among the fossil mammals found in the superficial deposits, wherein so much of the evidence of his own science must be sought. It discovers to him the precise link by which his pursuits take hold of the great chain of truth, and in a new sense shews man, not as an isolated creation, but as the last and best of an order of animated beings whose line sweeps back into the far removed shadow of an unmeasured past. "Phenomena like these," says Professor Sedgwick, when referring to the discoveries at the North Cliff, Yorkshire, in 1829, "have a tenfold interest, binding the present order of things to that of elder

[1] British Fossil Mammals, p. 162.

periods, in which the existing forms of animated nature seem one after another to disappear."[1]

Thus much is apparent from the most superficial glance at the geological evidence of the primeval state of Britain within the historic era, that though corresponding in its great geographical outlines to its present condition, it differed, in nearly every other respect, as widely as it is possible for us to conceive of a country capable of human occupation. A continuous range of enormous forests covered nearly the whole face of the country. Vast herds of wild cattle, of gigantic proportions and fierce aspect, roamed through the chase, while its thickets and caves were occupied by carnivora, preying on the herbivorous animals, and little likely to hold in dread the armed savage who intruded on their lair. The whole of these have existed since the formation of the peat began, and therefore furnish some evidence of the very remote antiquity to which we must refer the origin of some of the wastes that supply, as will be seen in subsequent chapters, an important element in the elucidation of primitive chronology. Upon this singular arena Archæology informs us that the primeval Briton entered, unprovided with any of those appliances with which the arts of civilisation arm man against such obstacles. Intellectually, he appears to have been in nearly the lowest stage to which an intelligent being can sink; morally, he was the slave of a superstition, the grovelling character of which will be traced in reviewing his sepulchral rites; physically, he differed little in stature from the modern inheritors of the same soil, but his cerebral development was poor, his head small in proportion to his body, his hands, and probably his feet, also small; while the weapons with which he provided himself for the chase, and the few implements that ministered to his limited necessities, indicate only the crude development of that inventive ingenuity which first distinguishes the reason of man from the instincts of the brutes. The evidence from which such conclusions are deduced, forms the subject of the following chapters.

[1] Anniversary Address to the Zoological Society, 1830.

CHAPTER II.

ABORIGINAL TRACES.

THOUGH we are assured, and cannot doubt, that man was created an intelligent being, capable of enjoying the high faculties with which he alone of all the denizens of earth was endowed, we have no reason to assume that he had any conception of the practical arts by which we are enabled to satisfy wants of which he was equally unconscious. We know on the same authority that there existed a period in the history of our race, ere Zillah, the wife of Lamech, had borne to him Tubal-cain, "the instructor of every artificer in brass and iron," when men tilled the ground, pursued the chase, made garments of its spoils, and constructed tents to dwell in, without any knowledge of the working in metals, on which the simplest of all our known arts depend. Through such a stage of primitive arts most, perhaps all, nations have passed. We detect evidences of it among the Egyptians, old as the date of their civilisation appears, in the stone knives of the embalmers, still frequently found in the catacombs. By such only could the incision be made in the side of the dead, through which to extract the intestines; and when they had been cleansed and replaced, the eye of Osiris, the judge of the dead, was placed as a mysterious seal over the sacred incision. The feeling in which such a custom originated, arising from the veneration which appears to be universally attached to whatever is ancient, is easily understood. While the knife of bronze or iron was freely employed for all ordinary purposes, the primitive stone implement was retained unchanged for the sacred incision in the dead. So also, probably from a like idea directly borrowed from the Egyptians, the stone or flint knife appears to have

been used by the early Hebrews in circumcision. Zipporah, Moses' wife, took a sharp stone, or stone knife, and cut off the foreskin of her son. The like was done when Joshua renewed the same rite at Gilgal in the east border of Jericho; while a still more remarkable community of feeling with the veneration of the ancient Egyptians for the otherwise obsolete implement of stone, is discernible in its retention by the priests of Montezuma as the instrument of human sacrifice.

The substitution of flint, stone, horn, and wood, in the absence of metal weapons and implements, must be abundantly familiar to all, in the customs of society when met with in a rude and primitive condition. The Fins and Esquimaux, the African bushmen, and the natives of such of the Polynesian Islands as are rarely visited by Europeans, still construct knives and arrow-heads of flint or fish-bone, and supply themselves with wooden clubs and stone adzes and hammers, with little consciousness of imperfection or deficiency in such appliances. Examples of such a state of arts and human skill might be multiplied from the most dissimilar sources. It seems, as has been already remarked, to be a stage through which all nations have passed, not without each developing a sufficient individuality to render their arts well worthy of investigation by their descendants. To this primitive era of history we refer under the name of THE STONE PERIOD.

In this state were the Scottish, and indeed the whole British aborigines, at an era much more remote than chronologists have been willing to assign for the occupation of the island by a human population, and for a period the duration of which we are also able in some degree to test.

There is one certain point in this inquiry into primitive arts which the British antiquary possesses over all others, and from whence he can start without fear of error, though I am not aware that its importance in this view has heretofore been noted. From our insular position it is unquestionable that the first colonist of the British Isles must have been able to construct some kind of boat, and have possessed sufficient knowledge of navigation to steer his course through the open sea. Contrasting the abbriginal arts to which we have referred with the appliances of later navigators, it seems only reasonable to conclude that the bark of the primeval Columbus, who led the way from the continent of Europe to the untrodden wilds of Britain, differed no less from the caravel of the bold Genoese, than that did from

the British ship that now follows in its course. Can we recover the history of such primitive caravel? It seems not improbable that we may. Time has dealt kindly with the frail fleets of the aboriginal Britons, and kept in store some curious records of them, not doubting but these would at length be inquired for.

It is by no means to be presumed as certain that the early navigators chose the Straits of Dover as the readiest passage to the new world they were to people. Both Welsh and Danish traditions point to a migration from Jutland. Whencesoever the first emigrants came, Providence alone could pilot their frail barks. Successive migrations, the chances of shipwreck, or the like independent causes, may have landed the fathers of the British race on widely different parts of our island coast. It is a well established fact, that at later periods many distinct and rival centres of population were thus established throughout the British Isle.

Lochar Moss, a well-known tract in Dumfriesshire, occupies an area of fully twelve miles in length, by between two and three miles in breadth, extending to the Solway Frith. Its history is summed up in an old popular rhyme, still repeated in the surrounding districts :—

"First a wood, and next a sea,
Now a moss, and ever will be!"

Lying as it does on the southern outskirts of the Scottish kingdom, the track of many successive generations has lain along its margin or across its treacherous surface, beneath which their records have been from time to time engulfed, to be restored in after ages to the light of day. To these we shall have occasion again to refer; but among them our chief attention is meanwhile attracted by its ancient canoes, repeatedly found along with huge trunks of trees, hazel-nuts, acorns, and other traces of the forest, and also, according to the old statist of Torthorwald parish, "anchors, cables, and oars," the no less obvious heirlooms of the sea. During the last century the peats cut from this moss formed almost the sole supply of fuel to the inhabitants of Dumfries and its neighbourhood, nor have they yet ceased to avail themselves of its ready stores.

In 1782 Pennant examined one of these rude barques formed from the trunk of an oak, which he thus describes: "Near a place called Kilblain, I met with one of the ancient canoes of the primeval inhabitants of the country, when it was probably in the same state of nature

as Virginia when first discovered by Captain Philip Amidas. The length of this little vessel was eight feet eight inches, of the cavity six feet seven inches, the breadth two feet, depth eleven inches, and at one end were the remains of three pegs for the paddle. The hollow was made with fire in the very manner that the Indians of America formed their canoes. Another was found in 1736, with its paddle, in the same morass. The last was seven feet long, and dilated to a considerable breadth at one end, so that in early ages necessity dictated the same inventions to the most remote regions."[1] In 1791 the minister of the parish describes another found by a farmer while digging for peats, at a depth of between four and five feet from the surface, and four miles from the highest reach of the tide, resting apparently on the alluvial soil which is there found beneath the moss. Near to the same spot a vessel of mixed metal, and apparently of great antiquity, was recovered, and numerous relics of various kinds, including what are described as anchors, oars, and other naval implements, have been found even at a distance of twelve miles from the present flood-mark—attesting at once the former populousness of the district, and the very remote period to which these evidences of its occupation belong.[2] At a depth of seven or eight feet in the Moss of Barnkirk, in the immediate neighbourhood of Newton-Stewart, Wigtonshire, another canoe of the same character as those already described, was dug up in 1814, and has been preserved, owing to its being converted by the farmer into the lintel of one of his cart-sheds. Mr. Joseph Train mentions having seen "a ball of fat or bannock of tallow, weighing twenty-seven pounds,"[3] found in the moss immediately above the canoe; and which no doubt was a mass of adipocère, indicating the spot where some large animal had perished in the moss: possibly sinking along with the rude British vessel that lay below. On the draining of Carlinwark Loch, Kirkcudbright, in 1765, a stone dam, an ancient causeway constructed on piles of oak, the vestiges of an iron forge, and other remarkable evidences of human industry and skill, were brought to light, including various canoes, described, like those of Lochar Moss and others found in Merton Mere, as apparently hollowed by fire.[4]

The Loch of Doon in Ayrshire, has at different periods furnished

[1] Pennant's Tour, vol. ii. p. 107.
[2] Sinclair's Stat. Acc. vol. i. p. 160.
[3] New Stat. Acc. vol. iv. Wigtonshire, p. 179.
[4] Sinclair's Stat. Acc. vol. viii. p. 305. New Stat. Acc. vol. iv., Kirkcudbrightshire, p. 155.

similar relics of ancient naval art. The fall of its waters in 1832, owing to an unusually protracted drought, permitted the recovery of two of these in a perfect state, one of them measuring about twenty-three feet in length, formed of a single oak tree, with the insertion of an upright plank into a broad groove for the stern. Numerous other relics of canoes were found to be imbedded in the same place; and the head of an ancient battle axe, a rude oak club, with other remains, gave further clue to the character of their builders.[1]

Lochwinnoch in Renfrewshire, has furnished similar canoes, accompanied by other relics of various eras—a brass ladle or patera, with an elegant handle terminating with a ram's head, probably Roman; and a very fine brass cannon, marked J. R. S. (5 ?) an antiquity of comparatively modern date.[2]

Five fathoms deep in the Carse of Falkirk, a complete boat was discovered, not far from the town, and therefore remote from any navigable water.[3] Sir John Clerk, well known as an enthusiastic Scottish antiquary of last century, describes with great minuteness another vessel found in the same locality, more remarkable from its size and construction than any of those yet described, and which he pronounces, from the series of superincumbent strata, to have been *an antediluvian boat!* In the month of May 1726 a sudden rise of the river Carron undermined a portion of its banks, and exposed to view the side of this ancient boat lying imbedded in the alluvial soil, at a depth of fifteen feet from the surface, and covered by successive strata of clay, shells, moss, sand, and gravel. The proprietor immediately ordered it to be dug out. It proved to be a canoe of primitive form, but of larger dimensions than any other discovered to the north of the Tweed. It measured thirty-six feet long by four feet in extreme breadth, and is described in a contemporary newspaper as finely polished and perfectly smooth both inside and outside, formed from a single oak tree, with the usual pointed stem and square stern.[4] Mingling with such indisputable traces of human art, are deposited the memorials of many successive changes. Among older relics of the same Carse, in the Edinburgh Museum, are the remains of a fossil elephant found in excavating the Union Canal in 1821, at a depth of some twenty feet in the alluvial soil, with the ivory in such perfect

[1] Archæologia Scotica, vol. iv. p. 299.
[2] Sinclair's Stat. Acc. vol. xv. p. 68.
[3] Beauties of Scotland, vol. iii. p. 419.
[4] Bibliotheca Topog. Britan., No. II. Part III. p. 242.

preservation that it was purchased and cut up by a turner, and only rescued in fragments from his lathe.[1]

But at higher levels in the valley of the Forth, and further from the sea, still more remarkable evidences of the primitive occupants of the country have been found. The ingenious operations by which the Blair Drummond moss has been converted into fertile fields have rendered it famous in the annals of modern engineering and agriculture. In the Carse lands, of which it forms a part, there was discovered in the year 1819, at a distance of a mile from the river, and in an alluvial soil, covered with a thin moss, the surface of which stood some twenty-five feet above the full tide of the Forth, the skeleton of a whale, with a perforated lance or harpoon of deer's horn beside it. A few years later another whale was found, and in 1824 a third was disclosed on the Blair Drummond estate seven miles further inland, and overlaid with a thick bed of moss. Beside it also lay the rude harpoon of the hardy Caledonian whaler; in this instance retaining, owing to the preservative nature of the moss, some remains of the wooden handle by which the pointed lance of deer's horn was wielded.[2] This primitive relic is now deposited, along with the fossil remains of the whale, whose death-wound it may have given, in the Natural History Museum of the Edinburgh University. Professor Owen remarks, in referring to this class of fossils,—"Although these depositories belong to very recent periods in geology, the situations of the cetaceous fossils generally indicate a gain of dry land from the sea. Thus the skeleton of a balænoptera, seventy-two feet in length, found imbedded in clay on the banks of the Forth, was more than twenty feet above the reach of the highest tide. Several bones of a whale discovered at Dunmore rock, Stirlingshire, in brick-earth, were nearly forty feet above the present level of the sea. . . . I might add other instances of the discovery of cetaceous remains in positions to which, in the present condition of the dry land of England, the sea cannot reach; yet the soil in which these remains are imbedded is alluvial or amongst the most recent formation. In most cases the situation indicates the former existence there of an estuary that has been filled up by deposits of the present sea, or the bottom of which has been upheaved."[3] Other relics besides those of the whale and the implement of its hardy assailant, were recovered in the course of

[1] Wernerian Trans. vol. iv. p. 58.
[2] Wernerian Trans. vol. v. p. 44.
[3] Brit. Fossil Mammals, p. 542.

removing the Blair Drummond moss. In the collection of the Society of Antiquaries of Scotland, a rude querne or hand-mill for pounding grain is preserved, fashioned from the section of an oak tree, which was found in 1831, at a depth of nearly five feet, in this moss. A wooden wheel of ingenious construction is also in the collection, which was dug up at more than double the depth of the querne, in the same locality, accompanied with several well-formed arrow-heads of flint. It measured when complete about two feet in diameter; but it is greatly decayed, having shrunk and cracked since its removal from the moss.[1]

Other relics, though belonging apparently to a later period, may be noticed along with these. In the progress of improvements on the Kincardine moss, the remains of a singular roadway were discovered, after the peat moss had been removed to a depth of eight feet. Seventy yards of the ancient viaduct were exposed to view, formed of trees about twelve inches in diameter, having other trees of half this thickness crossing them, and brushwood covering the whole. This road crossed the moss of Kincardine northward, from a narrow part of the Forth, towards a well-known line of Roman road which has been traced from a ford on the river Teith to Camelon, on the Antonine wall. This singular structure, though so unlike anything usually found on the line of the legionary iters, has been assigned, with great probability, to Roman workmanship, as it appears to be designed to keep up a communication with the well-known station at Ardoch. But if so, we have here evidence of the fact that in the second century of our era the Kincardine moss was an unstable and boggy waste, which the Roman engineer could only pass by abandoning his favourite and durable causeway, for such a road as modern ingenuity has revived in the backwood swamps of America.

Such are some of the ancient chronicles of Scotland garnered for us in the eastern valley of the Forth. The banks of the Clyde have been scarcely less liberal in their disclosures. In 1780, the first recorded discovery of one of the primitive canoes of the Clyde was made by workmen engaged in digging the foundation of Old St. Enoch's Church. It was found at a depth of twenty-five feet from the surface, and within it there lay a no less interesting and eloquent memorial of the simple arts of the remote era when the navies of the

[1] *Vide* Wern. Trans. vol. iii. p. 125, for the characteristic remains included in the recent alluvial formation of the valley of the Forth.

Clyde were hewn out of the oaks of the Caledonian forests. This is a beautifully-finished stone celt, represented in the woodcut—doubtless one of the simple implements of its owner, if not, indeed, one of the tools with which such vessels were fashioned into shape; though it is undoubtedly more adapted for war than for any peaceful art. It measures 5½ inches in length, by 3⅝ inches in greatest breadth; and is apparently formed of dark greenstone. It is now in the possession of Charles Wilsone Brown, Esq., of Wemyss, Renfrewshire, having descended to him from a maternal relative who chanced to be passing at the time of the discovery, and secured the curious relic.[1] The excavations of the following year brought a second canoe to light, at a higher level, and still further removed from the modern river's bed. Close to the site of Glasgow's ancient City Cross, and immediately adjoining what was once the Tolbooth of the burgh—more memorable from the fancied associations with which genius has endowed it, than for the stern realities of human misery which were its true attributes—there stands a quaint, but not inelegant building, adorned with an arcade curiously decorated with grim or grotesque masks on the key-stone of each arch. It was erected on the site of older and less substantial tenements, in the year 1781; and in digging for a foundation for it, in a stratum of laminated clay that lies beneath a thick bed of sand, another primitive British canoe was discovered, hollowed as usual out of a single trunk of oak.[2] Another is noted to have been found about 1824, in Stockwell, near Jackson Street, while cutting the common sewer; and a fourth, at a much higher level, on the slope of Drygate Street, immediately behind the prison.[3] In 1825 a fifth canoe was discovered, scarcely an hundred yards from the site of the former at the City Cross, when digging the sewer of London Street—a new thoroughfare opened up by the demolition of ancient buildings long fallen to decay. This boat, which measured about eighteen feet in length, exhibited unusual evidences of labour and ingenuity. It was built of several pieces of oak, though without

[1] For access to this interesting relic, as well as for much other valuable information, I am indebted to John Buchanan, Esq., of Glasgow.

[2] Chapman's Picture of Glasgow, 1818, p. 152.

[3] Chambers's Ancient Sea Margins, pp. 208-209.

ribs. It lay, moreover, in a singular position, nearly vertical, and with its prow uppermost, as if it had foundered in a storm.

To these older instances recent and large additions have been made. The earlier discoveries seem to point to a period when the whole lower level on the north side of the river, where the chief trade and manufactures of Scotland are now transacted, was submerged beneath the sea. What follows affords similar evidence in relation to the southern bank of the Clyde. Extensive operations have been carrying on there for some years for the purpose of enlarging the harbour of Glasgow, and providing a range of quays on the grounds of Springfield, corresponding to those on the older Broomielaw. There, at a depth of seventeen feet below the surface, and about 130 feet from the river's original brink, the workmen uncovered an ancient canoe, hewn out of the trunk of an oak, with pointed stem, and the upright groove remaining which had formerly held in its place the straight stern. The discovery was made in the autumn of 1847; and the citizens of Glasgow having for the most part a reasonable conviction that boats lose their value in proportion to their age, the venerable relic lay for some months unheeded, until at length the Society of Antiquaries of Scotland made application for it to the Trustees of the River Clyde, and the rude precursor of the fleets that now crowd that noble river is safely deposited in their museum. Meanwhile the excavators proceeded with their labours, and in the following year another, and then a third canoe of primitive form, were disclosed on the southern bank of the Clyde. One of these, which has been since removed to the Hunterian Museum, measures 19⅓ feet long, by 3½ feet wide at the stern, 2 feet 9½ inches wide midway, and 30 inches deep. The prow is rather neatly formed with a small cut-water, near to which is an oblong hole, apparently for running a rope through to anchor or secure the vessel. There had been an outrigger, which was described by the workmen as adhering to it when first discovered, and the holes remain for receiving the pins by which it was fastened. About the centre are small rests inside the gunwale for the ends of a cross seat, and others for a broader seat are at the stern, both being projections formed by leaving the wood when the trunk was originally hollowed out into a boat. In this example the stern remains nearly in a perfect state. It consists of a board inserted in vertical grooves cut in each side, and received into a horizontal groove across, beyond which the bottom and sides project about eight inches.

The other of these two canoes was chiefly remarkable for a circular hole in the bottom, stopped by a plug imbedded in very tenacious clay, evidently designed to admit of water shipped being run off when it was on shore. But the most curious, and indeed puzzling fact in regard to it, is that this plug is not of oak but of *cork*—a discovery suggestive of inquiries not easily answered satisfactorily.[1]

In the month of September 1849 a fourth canoe was found at Springfield, at a depth of about 20 feet from the surface, and in the same bed of finely laminated clay as those already described. This, too, is hollowed out of the single trunk of an oak, only thirteen feet in length, but on either side of it lay two additional planks of curious construction, each of them pierced with an elongated hole, which appeared to have been made with some sharp tool. They indicate some ingenious contrivance of the ancient seaman, not improbably designed for use when the bold navigator ventured with his tiny barque into the open sea, to be applied somewhat in the way a Dutch lugger fends off the dashing waves from her lee. This boat differs from those previously discovered, in having a rounded bow both fore and aft. In some respects it might seem to be the most ancient of the whole, and could hardly accommodate more than one man. Its workmanship is extremely rude, and it bears obvious marks of having been hollowed by fire. Yet the wooden appendages found alongside of it suffice to prove that its maker was not unprovided with some efficient tools. Thus, within a comparatively brief period, nine ancient canoes have been found within this limited area, affording singular evidence that in the earliest ages in which the presence of a human population is discoverable, we also find abundant proofs of the art of navigation, where now space fails to accommodate the merchant fleets of the Clyde. To these notices may be added the discovery of the remains of an ancient boat of more artificial construction, which was dug up, about the year 1830, at Castlemilk, Lanarkshire. It measured ten feet long, by two broad, and was built of oak, secured by large wooden pins.[2]

Nearly at the same time as the latest disclosures in the valley of the Clyde, workmen cutting a drain on the farm of Kinaven, Aberdeenshire, discovered another ancient boat of the same form as most of those previously described, and measuring eleven feet long, by nearly four broad. It is hewn out of the solid oak, with pointed stem, and at

[1] MS. Letters of J. Buchanan, Esq. [2] New Statist. Acc. vol. vi. p. 601.

the stern a projection formed in the piece, and pierced with an eye, as if to attach a mooring cable. Like the Glasgow canoes, it is rudely finished, and exhibits the rough marks of the instrument with which it was reduced to shape. It lay imbedded in the moss, at a depth of five feet, at the head of a small ravine; and near it were found the stumps and roots of several large oaks. The nearest stream, the Ythan, is several miles off, and the sea is distant many more. A few years previous to this discovery, a similar canoe, of still smaller dimensions, was dug up in the moss of Drumduan, in the same county. It is described as quite entire, and neatly formed out of a single block of oak; but being left exposed, it was broken by the rude handling of some idle herd-boys.[1]

Such are a few examples of the aboriginal fleets of ancient Caledonia, found at different dates, and in various localities, yet agreeing wonderfully in every essential element of comparison. With them might also be noted the frequent discovery in bogs, or in alluvial strata, of trees felled by artificial means, and accompanied with relics of the most primitive arts. In 1830, for example, workmen engaged in constructing a sewer in Church Street, Inverness, found at a depth of fourteen feet below the surface, in a stratum of stiff blue clay, numerous large trunks of fossil oak; and along with these several deer's horns, one of which, bearing unmistakable marks of artificial cutting, is now deposited in the Museum of the Society of Antiquaries of Scotland.[2] Here surely is common ground for the antiquary and the geologist. The rude harpoon left beside the bones of the stranded whale, far up in the alluvial valley of the Forth: the oaken querne, the wheel and the arrow-heads: the boats beneath the City Cross of Glasgow, the centre of a busy population for the last thousand years: the primitive ship, as we may almost term the huge canoe on the banks of the Carron: and the tiny craft just found near the waters of the Ythan—all speak, in no doubtful language, of the presence of a human population, at a period when the geographical features of the country, and the relative levels of land and sea, must have differed very remarkably from what we know of them at the earliest ascertained epoch of definite history. They point to a time within the historic era, when the ocean tides ebbed and flowed over the carse of Stirling, at a depth sufficient to admit of the gambols of the whale.

[1] New Statistical Account, vol. xii. p. 1059.

[2] MS. Letter of Lieut. Claudius Shaw, R.N. Lib. Soc. Antiq. Scot., April 19, 1858.

where now a child might ford the brawling stream; and when the broad estuary of the Clyde flung its waves to the shore, not far from the high ground where the first cathedral of St. Mungo was founded, A.D. 560. These evidences of population, prior to the latest geological changes which have affected the surface of the country, are indeed all found on old historic ground, according to the reckonings of written chronicles. The first of them, in the south country, have been met with in localities where the traces of Roman invasion in the second century remain uneffaced. The carse of Falkirk is still indented with the vallum of the Antonine wall. Its modern church preserves the old tablet, which assigned to the ancient structure on its site a date coeval with the founding of Scottish monarchy under Malcolm Canmore; and the broad level ground, which has disclosed evidence of such remarkable changes, alike in natural features and in national arts and manners, was the battle-field of Wallace in the thirteenth century, as of Prince Charles Edward and the Highland clansmen in the eighteenth century. Trivet thus refers to the carse of Falkirk, in describing the invasion of Edward I., thereby affording curious evidence of its state at the former period,—"Causantibus majoribus *loca palustria*, propter brumalem intemperiem, immeabilia esse;" on which Lord Hailes remarks—"The meaning seems to be, that the English could not arrive at Stirling without passing through some of the carse grounds, and that they were impracticable for cavalry at that season of the year."[1] Nor are the historic associations of the broad carse which the Forth has intertwined with its silver links a whit behind those of the vale of Carron. There, in all probability, Agricola marshalled the Roman legions for his sixth campaign, and watched the mustering of the army of Galgacus on the heights beyond. The ever memorable field of Bannockburn adds a sacred interest to the same soil. There, too, are the scenes of James III.'s mysterious death on the field of Stirling, and of successive operations of Montrose, Cromwell, Mar, and Prince Charles. But the oldest of these events, long regarded as the beginnings of history, are modern occurrences, when placed alongside of such as we now refer to. Guiding his team across the "bloody field," as the scene of English slaughter is still termed, the ploughman turns up the craw-foot, the small Scottish horse-shoe, and the like tokens of the memorable day when Edward's chivalry was foiled by the Scottish host. Penetrating

some few feet lower with his spade, he finds the evidences of former changes in the level of land and sea, but with them stumbles also on the relics of coeval population. Lower down he will reach the stratified rocks, including the carboniferous formation, stored no less abundantly with relics of former life and change, but no longer within the historic period, or pertaining to the legitimate investigations of archæological science, unless in so far as they confirm its previous inductions, and prove the slow but well defined progress of the more recent geological changes on the earth's surface. Such reflections are not suggested for the first time in our own day, nor will a shallow part satisfy those who have gone thus far. "Nature hath furnished one part of the earth, and man another. The treasures of time lie high, in urns, coins, and monuments, scarce below the roots of some vegetables. Time hath endless rarities, and shows of all varieties, which reveals old things in heaven, makes new discoveries in earth, and even earth itself a discovery. That great antiquity, America, lay buried for thousands of years, and a large part of the earth is still in the urn unto us."[1]

Some of these historic phenomena which are indicated above required only time to produce them. The beds of sand and loam at Springfield, in which the ancient fleets of the Clyde have lain entombed for ages, are such as the slow depositions of winter floods will for the most part account for, if the chronologist can only spare for them the requisite centuries. Others seem to point to geological changes within the historic era, of a more remarkable and extensive character. These it is not our province to explain. Whether the geologist find it most consistent with the established laws of his science to assume the standing of the whole ocean at higher levels within so recent a period, or adopt the more probable theory of local upheaval and denudation to account for these phenomena, this at least must be conceded, that the lapse of many ages is required for the changes which they indicate, and we can hardly err in inferring that civilisation had advanced but a little way on the plain of Nimroud, or the banks of the Nile, when the tiny fleets of the Clyde were navigating its estuary, and the hardy fishermen were following the whale in the winding creeks of the Forth.

[1] Sir Thomas Browne's Hydriotaphia.

CHAPTER III.

SEPULCHRAL MEMORIALS.

THE raising of sepulchral mounds of earth or stone to mark the last resting-place of the loved or honoured dead may be traced in all countries to the remotest periods. Their origin is to be sought for in the little heap of earth displaced by interment, which still to thousands suffices as the most touching memorial of the dead. In a rude and primitive age, when the tomb of the great warrior or patriarchal chief was to be indicated by some more remarkable token, the increase of the little earth-mound, by the united labours of the community, into the form of a gigantic barrow, would naturally suggest itself as the readiest and fittest mark of distinction. In its later circular forms we see the rude type of the great Pyramids of Egypt, no less than of the lesser British moat-hills and other native-earth-works, until at length, when the aspiring builders were rearing the gigantic monoliths of Avebury, they constructed, amid the tumuli of the neighbouring downs, the earth-pyramid of Silbury Hill, measuring 170 feet in perpendicular height, and covering an area of five acres and thirty-four perches of land.

Priority has been given to the primitive relics of naval skill, which the later alluvial strata of Scotland supply, for reasons sufficiently obvious, and pertaining exclusively to the antiquities of our insular home. But for the surest traces of primitive arts and a defined progress in civilisation, the archæologist will generally turn with greater propriety to the grave-mounds of the ancient race whose history he seeks to recover; for, however true be "the words of the preacher," in the sense in which he uttered them, there is both device, and know-

ledge, and instruction in the grave, for those who seek there the records of the dead. This fact is in itself an eloquent one in the evidence it furnishes, that in that dim and long forgotten past, of which we are seeking to recover the records, man was still the same, "of like passions with ourselves," vehement in his anger, and no less passionate in unavailing sorrow.

No people, however rude or debased be their state, have yet been met with so degraded to the level of the brutes as to entertain no notion of a Supreme Being, or no anticipation of a future state. Some more or less defined idea of a retributive future is found in the wildest savage creed, developing itself in accordance with the rude virtues to which the barbarian aspires. While the luxurious Asiatic dreams of the sensual joys of his Mohammedan elysium, the Red Indian warrior looks forward to the range of ampler hunting-grounds, and the enjoyment of unfailing victory on the war-path. All, however, anticipate a corporeal participation in tangible joys, and, to the simpler mind of the untutored savage, affection dictates the provision of means to supply the first requisites of this new state of being. Hence the bow and spear, the sword, shield, and other implements of war and the chase, laid beside the rude cinerary urn, or deposited in the cist with the buried chief. Refinement, which added to the wants and acquirements of the warrior, in like manner furnished new means for affection to lavish on the loved or honoured dead. Personal ornaments were added to the indispensable weapons, that the hero might not only stand at no disadvantage amid the novel scenes into which he had passed, but that he might also assume the insignia of rank and distinction which were his right. The feelings prompting to such tributes of affectionate sorrow are innate and indestructible. They manifest themselves under varied forms in every state of social being, and may be readily traced amid the struggle for decorous and costly sepulchral honours, no less universal now than in the long forgotten era of the tumulus and cinerary urn.

From the contents of the tumuli we are able partially to apply to them a relative system of chronology, the accuracy of which appears to be satisfactorily borne out. No archæologist has yet done for any district of Scotland what the intelligent research of Sir Richard Colt Hoare effected for Wiltshire. No other single district, indeed, offers the same tempting field for the study, and few archæologists possess his ample means for carrying out such investigations. He has adopted

a subdivision, which distinguishes fourteen different kinds of barrows, classified according to their shape, and furnishes a systematic nomenclature, which is of general avail. Observations since carried out over a more extensive field enable us in some degree to modify this system, and reduce the number of true barrows, while even of these some are probably only the result of accident, or of the caprice of individual taste. The following are the best defined among the varieties noted by Sir R. C. Hoare:—1. The long barrow, resembling a gigantic grave; 2. The bowl barrow, from its similarity to an inverted bowl; 3. The bell barrow; 4. The twin barrow, consisting of two adjacent tumuli, one of them generally larger than the other, and both inclosed in one fosse or vallum; 5. The Druid barrow, generally a broad and low tumulus, surrounded by a vallum. The last name was given on insufficient evidence by Dr. Stukely, Sir R. C. Hoare's predecessor in investigating the antiquities of Wiltshire. The latter has subdivided the class into three varieties, and there seems some reason to think that such indicate the place of interment of females; but more extensive observation is required to establish so interesting an inference. The remaining distinctions appear to be either accidental, or referring to earth-works, certainly not sepulchral. Among this last are the "pond barrows," hereafter referred to as the remains of primitive dwellings, and the conical mounds or moat-hills, of which Silbury Hill is probably the largest in the world, designed as the lofty tribunal where the arch-priest or chief administered, and frequently executed, the rude common law of the northern races. The laborious excavations carried out under the direction of the Archæological Institute during the Salisbury Congress in 1849, have at least put an end to any ideas of Silbury Hill being a sepulchral mound.

Much similarity is naturally to be expected between the primitive antiquities of England and Scotland, where the imaginary border land that so long formed the marches between rival nations presents no real barrier calculated to interpose an impediment to the free interchange of knowledge or arts. Nevertheless there are many of those distinctive peculiarities observable in Scotland which are well calculated to encourage further investigation, though, for the purposes of a just and logical distinction, the Scottish archæologist ought to include the ancient kingdom of Northumbria within the region of his researches, and draw his comparisons between the antiquities found to the north and the south of the great wall of Severus.

The barrows of Scotland, in so far as they have yet been carefully observed, may be described as consisting of the Long Barrow; the Bowl Barrow; the Bell Barrow; the Conoid Barrow; the Crowned Barrow—such as that of Stoneranda in Birsa—with one or more standing stones set upon it; the Inclosed Barrow, a circular tumulus of the usual proportions, and most frequently also conoid in form, but environed by an earthen vallum; and the Encircled Barrow, generally of large proportions, and surrounded by a circle of standing stones. The two latter are of frequent occurrence in Scotland. The evidence of their contents indicates that they belong to a comparatively late era, and their correspondence to some of the most common sepulchral memorials of Norway and Sweden suggests the probability of a Scandinavian origin. The twin barrow, with its enclosing vallum, as described by Sir R. C. Hoare, and still to be seen in Wiltshire, does not, I think, occur in Scotland. But it is not uncommon to find a large and smaller tumulus placed near together, and these pairs occur so frequently, especially in Orkney, that I incline to apply to them meanwhile the term of twin barrows, believing them to have more than an accidental relation to each other. This is a point, however, which can only be satisfactorily settled by the most careful examination of their contents. In the parish of Holm in Orkney, there is a cluster of eight tumuli of different sizes, all inclosed within one earthen vallum. Another group consists of one large and three smaller tumuli, surrounded by a double ditch, with the remains of a third on one side; and occasionally clusters of tumuli, though without any inclosing work, suggest the probability of their vicinity being the result of design. Another arrangement is also deserving of note, where a group of eight or nine of these earth-mounds occur forming a continuous chain, in a nearly straight line, and separated from one another by regular intervening spaces. Whatever appears to indicate design in these primitive structures is worthy of study. Wherever we can trace the motives of their constructors, we recover some clue to the character and history of the race.

The remarkable cluster of monolithic groups and earth-works at Stennis in Orkney, includes a variety of sepulchral mounds, probably belonging to very different periods. Scattered around the great circle, or Ring of Broidgar, as it is commonly called, there are many tumuli differing considerably in size and form, but all known to the peasants under the general title of the Knowes of Broidgar. The dimensions

of some of the largest of these were taken, during the recent Admiralty Survey, by Lieutenant F. W. L. Thomas, R.N., the intelligent officer in command, to whom I am indebted for the use of valuable notes of observations on the antiquities of Orkney :—

" The most remarkable tumulus, which is of elliptical shape, stands at the shore of the north or fresh-water loch. It measures one hundred and twelve feet long by sixty-six feet broad. The level ridge on the top measures twenty-two feet in length, and its height is nearly the same. It has been greatly destroyed by excavators at some former period. Near to it is a small standing stone. No other tumulus of this shape exists in Orkney. A large conoid tumulus, fifty feet in radius and twenty-eight feet in height, stands to the westward of the great circle, also pillaged at some former time ; and in the same neighbourhood are ten smaller tumuli of various dimensions. Five of these are of equal size : radius six feet, height three feet, and only from two to three feet apart ; four of them in a line."

Besides these, there stands, at a short distance to the northward of the elliptical tumulus, and near the shore, another large earth-work of peculiar form, which can hardly be more definitely described than by comparing it to a colossal plum-cake. It rises perpendicularly five feet, and is nearly flat on the top, assuming the form of a greatly depressed cone, the apex of which is nine feet high. The radius of the whole measures thirty-one feet. This mound, however, is most probably not sepulchral, but rather the platform on which a building of wood had been reared, though its present symmetrical form may render this doubtful. The Ring of Bookan, in the same neighbourhood, appears to be a similar platform, but it is inclosed with an earthen vallum, and exhibits abundant traces of ruined works on its irregular area. Various other, though less regular mounds, of this character, occur in Orkney. The burgh of Culswick is represented as having stood on such a platform, the shape of which nearly corresponded with that of Stennis when drawn in 1774, but the materials of this venerable ruin have since furnished a quarry for the neighbouring cottars.[1] It is exceedingly doubtful if the larger tumuli in the neighbourhood of the great circle of Stennis would now repay the labour of exploring them. They exhibit, as has been observed, abundant traces of former investigation ; and there is good reason to believe that most, if not all of them, have already been spoiled of their historic contents.

[1] Hibbert's Shetland, p. 452.

Wallace remarks, in his Description of Orkney:—"In one of these hillocks, near the circle of high stones at the north end of the Bridge of Stennis, there were found nine fibulæ of silver, of the shape of a horse-shoe, but round."[1] Unfortunately the dimensions of these silver relics are not given; but from the engraving of one of them, it seems more likely that they consisted chiefly of gorgets, though, in all probability, including a variety of objects of great interest. But the view of the great circle of Stennis, which accompanies that of the fibula found in its neighbourhood, is sufficient to satisfy the most credulous how little faith can be put in the engravings.

The most numerous and remarkable of all the Scottish sepulchral mounds, both for number and size, are the stone tumuli or CAIRNS, many of which are works of great labour and considerable skill. These singular monumental pyramids are by no means to be accounted for from any local peculiarities furnishing a ready supply of loose stones. They abound in almost every district of the country, and are frequently of much larger dimensions than the earthen tumuli, though the nature of their materials has led to the destruction of many of them in the progress of inclosing lands for agricultural purposes. We learn from the Book of Joshua of the practice of raising heaps of stone over the dead as a mark of indignity or abhorrence. The contents of the Scottish sepulchral cairns, however, prove for them an altogether different origin, as will appear when we come to review them in detail. They are generally designed on a larger scale than the earthen tumuli, and must have ranked at a remote period among the most distinguished honours awarded to the illustrious dead.

Another remarkable, though much rarer sepulchral monument, is the Cromlech, or "Druidical altar," as it was long erroneously termed, until archæologists, abandoning theory for observation, discovered that these huge monolithic structures invariably marked the sites of ancient sepulture. Similar primitive colossal structures are found, not only throughout the whole British Isles, but in many parts of the continent of Europe, and are occasionally discovered, like the slighter cist, entombed beneath the earth-pyramid or tumulus, affording thereby singular evidence of the unostentatious liberality with which the honours of the dead were rendered in the olden time to which they belong.

The Wiltshire of Scotland, in so far as the mere number of sepul-

[1] Account of the Islands of Orkney, by James Wallace, M.D., 1700, p. 58.

chral mounds, along with monolithic groups and other aboriginal structures, can constitute this distinction, is the mainland of Orkney, with one or two of the neighbouring isles. Few of their contents, however, have proved of the same valuable character as those which have been discovered not only in Aberdeenshire, Fifeshire, and some of the southern Lowland counties, but also in the Western Isles. We are therefore led to infer that the population of Orkney has been little more distinguished for wealth, or great advancement in the arts, during its earlier history than in more recent times. Abundant evidence, however, testifies to the occupation of these islands by a human population at a very remote era, and no Scottish locality ever furnished a greater variety of interesting relics of the primeval period. In the single parish of Sandwick, near Stromness, upwards of an hundred tumuli of different sizes have been observed, many of which have been recently opened, and their contents described. In the parish of Orphir, in like manner, considerable research has been made into the character and contents of these ancient memorials; while throughout nearly the whole of the neighbouring islands, the mosses and moors which have escaped the obliterating inroads of the ploughshare, are covered with similar monumental heaps.

It is not to be doubted that such relics of ancient population were once no less common throughout the whole mainland of Scotland, and especially in the fertile districts of the low country, where the earliest traces of a numerous population may reasonably be sought for. A sufficient number still remain in Fife and the Lothians, as well as in the southern counties, to afford means of comparison with other localities; while numerous discoveries of cists, urns, and ancient implements, leave no room to doubt that the same race once occupied the whole island, and practised similar arts and rites in the long cultivated districts of the low country, as in the remotest of the northern or western isles.

It is not improbable that extended observation may justify a more minute classification of the primitive sepulchral monuments of Scotland than has been attempted above, and may establish a relative chronological arrangement of them on a satisfactory basis. With our present imperfect knowledge, any theoretic system would only embarrass future inquiry. But meanwhile it may assist in forming a basis for further operations, to note the following attempts at systematic arrangement from such data as are available.

1. The Scottish long barrow, which is generally somewhat depressed in the centre, and more elevated towards one end than the other, may be assumed with little hesitation as one of the earliest forms of sepulchral earth-works. It is now comparatively rare. As the work of a thinly scattered population, it is probable that examples of it were never very numerous, and of these we may perhaps assume that the greater number have been gradually obliterated by structures of more recent date. So far as I am aware, no metallic implements have ever been found in the Scottish long barrow. Examples of pottery are also of very rare occurrence, and it is doubtful if any of these have furnished instances of the presence of the cinerary urn and its imperfectly burned contents in the primeval sepulchres. It is rather indeed from the absence of traces of art or ingenuity that we may most satisfactorily assign to this class of mounds the priority in point of antiquity. The form of the long barrow seems in itself to suggest the probability of an earlier origin than the circular tumulus, since it is only an enlargement of the ordinary grave-mound which naturally results from the displacement of the little space of earth occupied by the body, and in this respect strikingly corresponds with the most primitive ideas of a distinctive sepulchral memorial—a larger mound to mark that of the chief or priest, from the encircling heaps of common graves. In a long barrow opened in the neighbourhood of Port Seaton, East-Lothian, in 1833, a skeleton was found laid at full length within a rude cist. It indicated the remains of a man nearly seven feet high, but the bones crumbled to dust soon after their exposure to the air.[1] One of the largest Scottish earth-works of this primitive form is that already referred to, situated on the margin of the loch of Stennis, in the vicinity of the celebrated Orcadian stonehenge. It is the only long barrow on the mainland of Orkney, but its form and proportions differ considerably from those commonly met with. It seems probable that this belongs to a late era, and owes its origin to the same Norwegian

[1] Notices of remains found in tumuli and cists, of gigantic stature, frequently occur in the Statistical Accounts and other local records, but the statements are generally too vague to be of any value. Erroneous opinions, I believe, most frequently arise from comparing the *femur* or thigh-bone with the apparent length of the thigh, by persons ignorant of anatomy. Nothing, however, more readily secures distinction among a rude warlike people than the personal strength accompanying superior stature, if combined with corresponding courage; it need not therefore excite surprise if the larger tumuli should occasionally be found to cover the remains of some primitive chief of gigantic stature.

source as the neighbouring conoid earth pyramids that tower above the bowl barrows of the aboriginal Orcadians.

At a very early date, undoubtedly within the primitive era to which we give the name of the Stone Period, but apparently only towards its close, the practice of cremation was introduced. This, however, is one of the many points that must be left for final determination when a greater number of accurate and trustworthy observations have been accumulated. Meanwhile it may be assumed as unquestionable, that simple inhumation is the most ancient of all modes of disposing of the dead, and we possess abundant evidence of its use in this country, apparently by the earliest colonists of whom any definite traces now exist. We are not without proof that there was a long transition-period after the remarkable change consequent on the acquisition of metals, before the stone implements and arts were completely superseded by those of bronze; and it is to this era we shall most probably have to assign the first practice of cremation. Both the introduction of the metallurgic arts and the change of sepulchral rites may indeed be equally supposed to mark the influence, if not the advent, of a new race. In nearly every state of society the burial of the dead is associated with the most sacred tenets of religion, and its wonted rites are among the very last to be affected by change. It accords therefore with all analogy that the source of so remarkable a change should come from without, and accompany other equally important social revolutions. It will be seen in a succeeding chapter, that some of the very rudest and apparently most primitive of cinerary urns yet found in Scotland have been associated with undoubted proofs of their connexion with the bronze period. But it has not hitherto been the prevailing fault of British antiquaries to assign too remote an era to the introduction of the funeral pile. It has rather been one of the endless blunders springing from the too exclusively classical nature of modern education, to assume for it a Roman origin, and to accept the urn as an evidence of Roman influence and example, even where it was owned to be the product of native art. If, however, we make sufficient allowance for the poetical preference of the funeral fire and the inurned ashes, rather than the simple and more common rite, and so decline to receive some of the allusions of Virgil and Ovid as historic evidence of the ancient usage of the former by the Romans, we shall find good reason for inferring that the funeral pile should rank among the later

introductions of Roman luxury, derived in all probability from the Greeks, by whom it was used at a very early period. The oldest accounts indeed which we possess of the sepulchral honours of the funeral pile, the urn, and the monumental tumulus, are the descriptions of the funeral rites of Patroclus and Hector in the Iliad. The whole circumstances are characterized by much simple grace and beauty:—the burning of the body during the night, the libations of wine with which the embers were quenched at the dawn, the inurning of the ashes of the deceased, and the methodic construction of the pyramid of earth which covered the sacred deposit, and preserved the memory of the honoured dead.[1] The testimony of Pliny, on the contrary, is most distinct as to the introduction of a similar practice among the Romans at a comparatively late period.[2]

Independent of the consideration of Roman usage, it is unquestionable that the funeral pile must have been in use in the British Isles for many generations before the era of the Roman Invasion, if not indeed before that of Rome's mythic founder. But the evidence of the Scottish tumuli, while it proves the ancient practice of cremation, shows also the contemporaneous custom of inhumation; nor is it possible, so far as I can see, to determine from the amount of evidence yet obtained, that one of these was esteemed more honourable than the other.[3] It is not, indeed, uncommon for the larger tumuli to contain a single cist, with the inhumed remains untouched by fire, and around it, at irregular intervals, several cinerary urns, sometimes varying in size and style, but all containing the half-burned bones and ashes of the dead. The inference which such an arrangement suggests would seem to point to inhumation as the more honourable rite; but even where either inhumation or cremation has been the sole mode of disposing of the bodies, we still detect obvious

[1] The account which Tacitus gives of the simpler rites of the ancient Germans probably more nearly accords with those of the primitive Britons: "Funerum nulla ambitio; id solum observatur, ut corpora clarorum virorum certis lignis crementur. Struem rogi nec vestibus, nec odoribus cumulant; sua cuique arma, quorundam igni et equus adjicitur."—Tacit. de Morib. Germ. cap. 27.

[2] Ipsum cremare apud Romanos non fuit veteris instituti, terra condebantur.—Hist. Nat. lib. vii. c. 54.

[3] Cases occur where the original tumulus has been adopted as a place of sepulture long subsequent to its original construction. Care is therefore required to discriminate between superficial interments of late date, and the original cist or urns: but it is rarely difficult to detect the evidences of intrusion. The slight depth at which they are generally interred affords in itself a striking contrast to the labour exercised by the constructors of the sepulchral mound. It is also to be borne in remembrance, that all the urns found in tumuli are not sepulchral, or proofs of cremation.

marks of distinction, and of superior honours conferred on one or more of the occupants of the tumulus. In one of the largest of a numerous group of tumuli near Stromness, in Orkney, which was opened by the Rev. Charles Clouster, minister of Sandwick, in 1835, evidences of six separate interments were found, all so disposed on the original soil, and in contact with each other, as scarcely to admit of doubt that the whole had taken place prior to the formation of the earthen mound beneath which they lay. Two large and carefully constructed cists occupied the centre, and contained burnt bones, but without urns; while around these were four other cists, extremely rude, and greatly inferior both in construction and dimensions. In such we probably should recognise the family cemetery,—the two larger and more important cists containing, it may be, the chief and his wife, and the surrounding ones their children, or favourite dependents, or perhaps their slaves.

One of the most interesting examples which have been accurately observed of simple interment accompanied with urns and relics entirely belonging to the primitive period, was discovered on the opening of a small tumulus in the parish of Cruden, Aberdeenshire. Within it was found a cist containing two skeletons nearly entire. One of these was that of an adult, while the other appeared to have been a youth of twelve or thirteen years of age, in addition to which there were also portions of the skeleton of a dog. Beside them stood two rude clay urns, slightly ornamented with encircling lines, but containing no incinerated remains; and within the cist were found seven flint arrow-heads, two flint knives, and a polished stone, similar to one now in the Scottish Museum, which is described in a succeeding chapter. It is slightly convex on one side, and concave on the other, with small holes drilled at the four corners, by which it would seem to have been attached, most probably, to the dress, as an article of personal adornment. These curious relics are now in the collection of Adam Arbuthnot, Esq., of Peterhead.

Cæsar relates of the Gauls that they burned their honoured dead, consuming along with them not only the things they most esteemed when alive, but also their dogs and horses, and their favourite servants and retainers.[1] Without any reference to this remarkable passage, it is scarcely possible to overlook the evidence which suggests the idea of some such Suttee system having prevailed among

[1] De Bell. Gall. lib. vi. chap. 19.

the aboriginal Britons, when observing the opening of a large tumulus, as it discloses its group of cists or urns, or of both combined. It seems hardly reconcilable with the general customs or ideas of a primitive community, to suppose that the earthen pyramid was systematically husbanded by its ancient builders like a modern family vault, or disturbed anew for repeated interments, unless by those who had lost all remembrance of its original object. Towards the close of the Pagan era, and in that transition-period which extends in Scotland from the fifth to about the ninth century, during which the rites of the new faith were still blended with older Pagan customs, it was no doubt different, and regular cemeterial tumuli are found, which must have accumulated during a considerable period. These, however, differ essentially from the earlier tumuli; and if we are to suppose the whole group of urns or cists in the latter to have been deposited at once, it is difficult to conceive of any other mode of accounting for this than the one already suggested, which is so congenial to the ideas of barbarian rank, and of earthly distinctions perpetuated beyond the grave. Instances do indeed occur both of cists and urns found in large tumuli near the surface, and so far apart from the main sepulchral deposit as to induce the belief that they may have been inserted at a subsequent period; while the large chambered tumuli and cairns must be supposed to have been the burial-places of a tribe or sept. It must not be overlooked that the tumuli are not, in general, to be regarded as common graves, but as special monumental structures reserved alone for the illustrious dead; among whom, no doubt, were reckoned those who fell in battle, and over whom we may therefore conceive the surviving victors to have erected those gigantic cairns which are occasionally found to cover a multitude of the dead. But some of the Scottish cairns which have been found only to inclose a solitary cist, must have occupied the labour of months, and required the united exertions of a numerous corps of workmen, to gather the materials, and pile them up into such durable and imposing monuments.

The remembrance of how greatly the dead of a few generations outnumber the living, would alone suffice to show that the tumuli could not be common sepulchral mounds. Such a custom universally adopted for a few generations in a populous district, would surpass the effects of deluges and earthquakes in the changes wrought by it on the natural surface of the ground. The laws of Solon interdicted

the raising of tumuli on account of the extent of land they occupied; and the Romans enacted the same prohibitory restrictions prior to the time of Cicero. We are familiar with the common modes of British sepulture, contemporaneous with the monumental tumulus; both the cist and the urn being very frequently found without any artificial increase of the superincumbent soil to mark the spot where they are deposited. Their inhumation beneath the soil, as well as the frequent occurrence of numbers together, point them out as the common and undistinguished graves of the builders of the tumuli. Where the tumulus was to be superimposed no such interment took place. The cist was constructed on the natural surface of the soil, and over this, earth brought from a distance—or occasionally cut away from the surface immediately surrounding the chosen site, so as thereby to add to its height—was heaped up and moulded into the accustomed form. In its progress the accompanying urns were disposed, frequently with little attention to regularity, in the inclosed area; nor is it uncommon to find along with these the bones of domestic animals. In the later tumuli are occasionally found the bronze bridle-bit and other horse furniture, and sometimes teeth and bones, and even the entire skeleton of the horse. The skeleton of the dog is still more frequently met with: and it is to be regretted that in Scotland the fact has hitherto been recorded without any minute observations being attempted on the skeleton, from which to ascertain its species, and perhaps thereby trace the older birthland of its master.[1] The Rev. Alexander Low, in a communication laid before the Society of Antiquaries of Scotland in 1815, refers to the entire skeleton of a horse discovered interred between two cists, where a large cairn had been demolished in the parish of Cairnie, Aberdeenshire. Other examples will come under our notice, all indicating the prevalence of the custom above referred to, so consonant with barbarian ideas of rank, and with the rude conceptions of a future state which still linger in parts of the Asiatic continent, where the philologist has traced the evidences of a common origin with the wandering tribes that found their way across the continent of Europe and peopled the British Isles. This, however, in passing: the reader will find no difficulty in separating fact from fancy when judging for himself.

[1] Dr. Hodgkin read a paper at the meeting of the British Association, held at York in 1844, on the dog as the associate of man, chiefly with a view to shew how much the study of the inferior animals which, by accident or design, have accompanied man in his diffusion over the globe, is calculated to throw light on the affinities of races.

The Long Barrow has been stated to belong apparently to the rude primeval period; but the number of examples which have been carefully examined are still too few to admit of very positive conclusions being assumed. A remarkable group of Scottish long barrows occurs in the immediate neighbourhood of the Pass of Keltnie, Perthshire. One of them was opened in 1837, and found to contain unburnt bones, along with which were discovered several rude horn lance-heads and pieces of bone artificially cut. The state of preservation in which these were, when compared with the rapid decay of the human remains almost immediately on their exposure to the air, opens up an interesting inquiry in relation to these primitive sepulchral deposits. The very different conditions in which the contiguous bones are found seem at first sight incompatible with the idea of their having been deposited along with the original occupants of the barrow. But the fragile texture of the human skeleton, when compared with that of the lower animals, is well known. Professor Goodsir informs me that his investigations have led him to the direct conclusion that the bones of the lower animals decay much less rapidly than those of man. The state of the skeletons of dogs and horses found in the tumuli confirms this conclusion, which is probably sufficiently accounted for by the greater delicacy of structure characterizing the human osteology. But independently of this, bone implements finished and deposited in a cist or tumulus in a perfect state, would be much less directly exposed to the influences affecting the skeleton amid the decomposition of the vascular tissues. It may be noted along with these observations on early tumuli, that a large conical cairn in the vicinity of the long barrows of Keltnie was demolished in 1836. It contained eleven cists, several of which inclosed cinerary urns, but no metallic relics were found in them.

The change to the circular tumulus is not accompanied with any indications of alteration in the arts of its constructors. Stone weapons and implements are of frequent occurrence in the latter, and particularly in the bowl barrow, though no distinctive evidence has yet been noted in relation to the most common forms of tumuli, sufficiently marked to be resolved into any general rule, save the very natural and obvious one, that the larger ones appear from their contents to be the more important. It is manifest, however, that some art was always exercised in giving to the tumulus an artificial form. Neither the bowl nor the bell shape is that which earth naturally

assumes when thrown up into a heap. The form is therefore a matter worthy of further observation, and may yet prove a legitimate basis of stricter classification in reference to the era or race, than that now attempted. The bell-shaped tumuli are not very common in Scotland, but where they do occur they are generally of the larger class, though not always distinguished by any marked peculiarity in their contents. Such was found to be the case on opening the Black Knowe, which appears from a drawing of it to be a bell-shaped tumulus, and is one of the most remarkable for size in the parish of Rendale, Orkney. It was explored in February 1849 by Mr. George Petrie, a zealous Orkney antiquary, in company with Lieutenant Thomas, R.N., while engaged in the Admiralty Survey. I am informed, however, by the latter, that its shape was by no means uniform, and viewed from some points it differed little from the common bowl barrow, of which it is computed that above two thousand are still to be found scattered over the Orkney Islands alone. In the centre and on a level with the natural surface of the soil, there was found a small chamber or cist of undressed stones, measuring eighteen by twelve inches, and containing only an extremely rude cinerary urn, filled with bones and ashes mixed with clay.

Both the Enclosed and the Encircled Barrows are frequently of large dimensions, and indicate by their contents that they belong to the later era, when the metallurgic arts had been introduced. In various instances the contents of the enclosed barrow, or tumulus surrounded with an earthen vallum, clearly prove it to belong to the Roman era. In one, for example, in the neighbourhood of Rutherglen, Lanarkshire, which measured 260 feet in circumference, a gallery or long chamber was discovered, constructed of unhewn stones, and containing, among other relics, two brass vessels, which from the description appear to have been Roman patellæ. On the handle of each of them was engraved the name CONGALLUS or CONVALLUS. With these were deposited various native relics, including a perforated stone and three large glass beads, such as are frequently found in earlier British tumuli.[1] Examples, however, are not wanting of the enclosed barrow with contents belonging to an earlier period. One of such formed the largest of a group which occupied the summit of one of the Cathkin hills in the parish of Kilbride. It measured eighteen feet in height, and one hundred and twenty feet in diameter, and bore the name of

[1] Ure's History of Rutherglen, p. 124.

Queen Mary's Law, from a popular tradition that the hapless Mary watched from its summit the ebbing tide of her fortunes on the fatal field of Langside. This interesting memorial, thus associated with two widely severed periods of Scottish history, afforded building materials to the district for many years, until in 1792 some workmen while employed in removing stones from it, exposed to view a vault or chamber situated towards the west side of the mound, and containing twenty-five rude cinerary urns. They were placed, as is most usual in the earlier sepulchres, with their mouths downward, and underneath each urn lay a piece of white quartz. Exactly in the centre of the cairn a rude cist was discovered measuring nearly four feet square, and among a quantity of human bones which surrounded it were two rude fibulæ of mixed metal, and an armilla or ring of cannel coal. Another fibula and an equally rude metal comb were found in one of the urns.[1]

The Crowned and the Encircled Barrows closely resemble a class of monuments which abound in Sweden and Denmark, while they are of rare occurrence in England. In the "Samlingar för Nordens Fornälskare,"[2] a variety of examples of both have been engraved; some of which have a second circle of stones placed about half-way up the mound, and a large standing stone on the summit. Such correspondence, however, is not necessarily a proof of Scandinavian origin, nor do they occur most frequently in districts of Scotland where the long residence or frequent incursions of the Norwegians would lead us to expect Scandinavian remains. In a large encircled barrow called Huly Hill, opened in 1830, at Old Liston, a few miles to the west of Edinburgh, a bronze spear-head was found along with a heap of animal charcoal and small fragments of bones, but neither cist nor urn. A solitary standing stone, measuring about nine and a half feet in height, occupies a neighbouring field, a little to the east of it. Another barrow which stood near the Abbey of Newbattle, East-Lothian, was of a conical form, measuring thirty feet in height, and ninety feet in circumference at the base. It formed a prominent and beautiful object in that noble demesne, surrounded at its base with a circle of standing stones, and crowned on the summit with a large fir-tree. On its removal to make way for some additions to the Abbey, it was found to contain a cist nearly seven feet long, enclosing a human skeleton. A remarkable skull preserved in the Edinburgh Phrenolo-

[1] Ure's History of Kilbride, pp. 216-219.

[2] By N. K. Sjöborg. Two vols. quarto. Stockholm, 1822.

gical Museum, and described as found in a stone coffin in a tumulus opened at Newbattle in 1782, appears to belong to this memorial mound.

One other remarkable form of barrow occasionally, though very rarely, found in Scotland, in all probability owes its origin to the Vikings who invaded and colonized our coasts at the close of the Pagan period. This consists of an oblong mound of larger size than the primitive long barrow, and terminating in a point at both ends. Some examples are also inclosed with stones, having one of considerable size at each end; and from their rarity and their remarkable resemblance to the *Skibssœtninger*, or ship barrow of Sweden, there can be little hesitation in assigning to them a Scandinavian origin. One of these encircled ship barrows was only demolished a few years since, on the farm of Graitney Mains, Dumfriesshire, but no record of its contents has been preserved. A much more celebrated one, and, according to venerable traditions, of undoubted native origin, is the Mound of St. Columba, at *Port a Churaich*, or the Bay of the Boat, which is believed to mark the spot where the Saint first landed on Iona. It measures about fifty feet in length, and is supposed to be a model of St. Columba's *currach*, or boat made of wicker and hides, built by him in commemoration of his landing on the sacred isle. An upright stone formerly stood at each end, and near to it is a smaller mound, representing, as is said, the little boat towed astern. In all probability an investigation of the contents of this traditional memorial would prove its sepulchral character, as has been found to be the case in other Scottish ship barrows.[1] These singular tumuli are described by Chalmers as "oblong ridges, like the hulk of a ship, with its bottom upwards." But it appears from the investigations of northern antiquaries, that this sepulchral monument was not only the mimic representation of the Vikings' ship, but that the contents of the Scandinavian *Skibssœtninger* seem to confirm the assertion of their sagas, that these warriors of the deep were sometimes literally burnt in their ships, and the form of the favourite scene of their triumphs renewed in the earth-work that covered their ashes.[2]

To this class probably belongs a very large earth-work, styled the Hill of Rattray, Perthshire, and perhaps also another of still larger dimensions, called Ternavie, in the parish of Dunning, in the same county. It is a mound of earth, resembling a ship with the keel uppermost, and occupying several acres of ground. The name ap-

[1] Graham's Antiquities of Iona, Plate III. [2] Worsaae's Primeval Antiquities, p. 109.

pears to be a corruption of terræ navis, or earth-ship, given to it on account of its form. Superstition has conferred a sacredness on it, by the association of legends evidently of primitive character. It is told that a profane hind, having proceeded to cut turfs on the side of the Terrnavie, was suddenly appalled by the vision of an old man, who appeared in the opening he had made, and after demanding, with an angry countenance and voice, why he was tirring (unroofing) his house over his head, as suddenly vanished.[1] Remains of ancient armour were dug up a few years ago, on the farm of Rossie, a little to the east of Terrnavie; of these "two helmets, a small hatchet of yellow metal, and a finger ring, are preserved in Duncruib House."[2]

The barrow was not, in all probability, entirely superseded until some time after the introduction of Christianity into Scotland. Several examples seem to indicate that the Anglo-Saxons were wont to convert an accumulating barrow into the general place of sepulture of a locality, interring the body apparently in its ordinary robes, but without any cist. Such appears to have been the tumular cemetery at Lamel Hill, near York, of which a minute account is given by Dr. Thurnam, in the Archæological Journal; and such also was a large sepulchral mound, levelled near the beach at North Berwick, East-Lothian, in 1847, in preparing a site for new gas-works. The latter was in the immediate vicinity of what appears to have been used as a general burial ground probably till a late medieval era, but its contents were clearly referrible to the Anglo-Saxon period; while in the same neighbourhood many cists and other relics of still older races have been found. This last adaptation of the primitive memorial mound as the cemetery of a whole race, ere it was abandoned along with the creed to which it had been allied, is thus beautifully referred to in the description by Dorban, an ancient Irish poet, of the *Relec na Riogh*, the place of interment of the kings of the Scotic race, of which the last Pagan monarch was killed in the year 406.

"Fifty mounds, I certify,
Are at Oenach na Cruachna,
There are under each mound of them
Fifty fine warlike men.
Every hill which is at Oenach
Has under it heroes and queens,
And poets and distributers,
And fair fierce women.

"The host of Connaught that was energetic,
A truly warlike host,
Beautiful the valiant tribe,
Buried in Cathair Cruachna.
There is not at this place
A hill at Oenach na Cruachna,
Which is not the grave of a king or royal prince.
Or of a woman or warlike poet."[3]

[1] Sinclair's Statist. Acc. vol. xix. p. 441.
[2] New Statist. Acc. vol. x. p. 717.
[3] Petrie's Eccles. Architect. of Ireland, pp. 103-5.

The Cruachna, or Cruithne, are the older Pictish or Celtic race particularly referred to hereafter. They are numbered among the Pagans in the same poetic description of the great regal cemetery of Ireland,—

> "The three cemeteries of idolaters are
> The cemetery of Tailten, the select;
> The cemetery of the ever-fair Cruachan,
> And the cemetery of Brugh."

Of all the more remarkable Scottish sepulchral memorials, the Cairn is most frequently found, scattered through many districts, and corresponding in form to nearly every class of the earthen tumuli. So common, indeed, are cairns in many parts of the country, that they give names to the farms on which they stand, the prefix or termination, cairn, being of very frequent occurrence in such designations of property, particularly in Aberdeenshire. The cairn appears to have been completely incorporated with the ideas of the people, from the remotest period of the rude stone implements, to the close of Pagan customs and sepulchral rites, and is justly described as a Celtic monument. Its name, *kærn*, is a primitive term, literally signifying heaps of stones.[1] Dr. Jamieson traces it back to the Hebrew *kern*, a horn, also applied to a hill. In the agreement between Jacob and Laban, we see an example of the standing stone and cairn, the "pillar and heap," employed as the memorials of a covenant by the Hebrew patriarch. In the sepulture of Achan and of Absalom we have examples of the cairn as a mark of obloquy and contempt; but no traces of such associations are discoverable in Scotland, unless in very recent times. Occasionally we meet with examples of the pillar and heap united in a memorial cairn, as in one of large dimensions, situated at the junction of two roads, near the village of Fowlis, Perthshire, which is surmounted by a large standing stone, corresponding to the barrows, for which the distinctive appellation of crowned tumuli is suggested. The estimation of the cairn as an honourable memorial of the dead, is proved not only by the valuable contents, more frequently discovered in cairns than in any other Scottish sepulchral mounds, but also by the associations which popular tradition has preserved. A proverbial expression, still in use among the Scottish Highlanders, is *Curri mi clach er do cuirn*, I will add a stone to your cairn: *i.e.*, I will honour your memory when you are gone. The conical cairn must have been in use in Scotland

[1] Add. to Camd. Brit. in Radnorshire.

during a longer period than any other sepulchral memorial. It undoubtedly belongs to the Stone Period, during which it was frequently constructed of proportions no less gigantic than in later eras, and much greater than any contemporary earthen tumulus. But it appears to have been the favourite and most distinguished sepulchral memorial of the aboriginal races, throughout the whole three periods into which archæologists divide the long era prior to the revolutions effected by Roman civilisation and the introduction of Christianity. Cairns are either still found, or are known to have existed, in nearly every parish of Scotland. Many of these have been works of great labour, being regularly built of stones of considerable size, and approaching more to the character of a constructive pyramid, than of a mere stone tumulus or heap. Their form is most frequently conical, but several varieties occur, including occasionally, though rarely, the primitive shape of the long barrow. Ure describes two of this form, which were situated in the parish of Baldernoch, Stirlingshire, near a large cromlech, which still exists, styled, *The auld wives' lift.* The largest of these cairns measured sixty yards in length, and only ten yards in breadth. On its demolition it was found to cover a sepulchral chamber of about four feet in breadth, constructed of rows of broad stones set on edge, covered with large flat stones, and containing numerous human remains. In the other long cairn, which was opened in 1792, a similar chamber enclosed both urns and human bones. Various other cairns still remain unopened in the same district; and many of equal magnitude are to be met with in different parts of the country. The well-known antiquary, Mr. Joseph Train, furnishes an interesting account of several remarkable cairns in the parish of Minniegaff, Kirkcudbrightshire. One of these, called *Drumlawhinnie*, on the moor of Barcly, measures 891 feet in circumference. Another of equal dimensions, called the *Boss Cairns*, on the moor of Dranandow, which has been partially demolished to construct the neighbouring field inclosures, contains a sepulchral inclosure, similar to the cruciform chambers found in several of the most celebrated gigantic Irish cairns. It measures internally eighty feet in length, from the corresponding limbs of the cross each way, while it is only four feet wide and about three feet high. The stones in the middle of the cairn are very large, and are laid in regular courses, from the bottom to a considerable height, and become gradually smaller as they recede from the centre. The chamber of the

Grey Cairn, on the neighbouring Drum of Knockman, closely resembles this in form and dimensions, and various others occur in the district. In one of them, called the *White Cairn*—which furnished a safe concealment to the Laird of Glencaird and his two sons, when pursued by Claverhouse for harbouring some of the persecuted Covenanters—some of the stones used in constructing the internal chamber are upwards of a ton weight each.[1] Pennant has preserved a variety of interesting details of the contents of cairns opened towards the close of last century. In one described by him on the hill of Down, near Banff, a chamber was found containing a large ornamented Celtic urn, with three smaller plain ones disposed around it. The whole were filled with ashes and burnt bones, in addition to which were flint arrow-heads, and two bone implements. Thirteen of the arrow-heads, and one of the implements, were found in the large central urn.[2] In two cairns in the parish of Tynron, Dumfriesshire, more recently opened, there were found cists, each of which contained fragments of bone, and a stone hammer.[3] Similar relics have been found in the cairns of Wigtonshire, where these sepulchral monuments are so numerous, that forty-nine have been counted in the small valley of Barnair. There is, indeed, no lack of abundant testimony to prove the erection of some of the largest Scottish cairns during the Stone Period. Others of later eras are equally common.

Sir John Clerk of Pennycuick communicated to Roger Gale, Esq., in 1726, a very interesting account of five cairns, opened and examined by himself or his friends, in different parts of Scotland. One at Bruntone, in the parish of Pennycuick, Mid-Lothian, contained only two cists, each about two feet in length, but without urns or relics. Another in Ayrshire contained human bones, apparently of a number of men, which had been partially subjected to fire, and beside them lay a flint adze, or axe-head. The contents of the third, which was also in the west of Scotland, are thus described:—"Some urns, placed on the top and about the sides of it, as well as some principal urns at the bottom, over which it had been raised. Large bones of horses and oxen, confusedly scattered among the stones and rubbish. The head of a spear, half melted by fire, and several other brass instruments, which had likewise suffered in the fire, and could not be well known."[4] The others, which were situated, one at Pennycuick, Mid-Lothian, and the other in Galloway, appear to have been native cairns, contemporary with the Roman invasion,—thus furnishing a series of examples of the Scottish cairn pertaining to each of the Pagan eras of our national history.

In the year 1828 a remarkable cairn was opened on Airswood

[1] New Statist. Acc. vol. iv., Kirkcudbright, pp. 132, 133.

[2] Pennant's Tour, vol. i. p. 156.

[3] New Statist. Acc., Dumfriesshire, vol. iv. p. 475.

[4] Itiner. Septen. Append. pp. 171-177.

Moss, Dumfriesshire, by a party of labourers, when seeking for stones with which to build a "march dyke," or boundary wall. The cairn consisted, as usual, of a heap of loose stones, surrounded by a ring of larger stones, closely set together. These formed a regular circle, measuring fifty-four feet in diameter. Its form, however, was singular. For about fourteen feet from the inner side of the encircling stones it rose gradually, but above this the angle of elevation abruptly changed, and the centre was formed into a steep cone. Directly underneath this a cist was found, lying north and south, composed of six large unhewn stones, and measuring in the interior four feet two inches in greatest length, with a depth of two feet. It contained only human bones, indicating a person of large stature, laid with the head towards the north. The further demolition of the cairn disclosed a curious example of regular internal construction on a systematic plan. From the four corners of the central cist there extended, in the form of a saltire, or St. Andrew's cross, rows of stones overlapping each other like the slating of a house. At the extremity of one of these, distant about fourteen feet from the central cist, another was found of corresponding structure and dimensions, but laid at right angles to the radiating row of stones. Another is said to have been found at the extremity of one of the opposite limbs of the cross; and it seems most probable that the whole four were originally conjoined to corresponding cists, but a considerable portion of one side of the cairn had been removed before attention was directed to the subject. Between the limbs of the cross a quantity of bones, in a fragmentary state, were strewn about.[1] Such a disposition of a group of cists, under a large cairn, though rare, is not without a parallel, and may perhaps be found characteristic of a class. The Rev. Harry Robertson of Kiltearn describes one in that parish, about thirty paces in diameter, which contained a central cist three and a half feet long, and at the circumference on the east, south, and west sides, three others of similar dimensions. As the cairn was in this case also imperfect, and partly demolished, it is not improbable that a fourth, on the north side, may have been previously destroyed.[2] Here, as in the tumuli with cinerary urns surrounding the central cist, the group of urns in the cairn on the hill of Down, and in numerous other in-

[1] Dumfries Journal, June 24, 1828. MS. Communication, Soc. Antiq. Scot., Andrew Brown, Esq., read March 9, 1829.

[2] Sinclair's Statistical Account, vol. i. p. 292.

stances, we find a singular arrangement, apparently designed as subservient to the honours lavished on some distinguished chief.

One of the most remarkable groups of cairns in Scotland associated with other primitive monuments, occurs on a small plain washed by the River Nairn, about a mile to the east of the field of Culloden. The whole plain, for upwards of a mile in extent, is covered over with large cairns, encircled by standing stones surrounding them at uniform intervals. Numerous circular groups or "Druidical Temples" occur in the same neighbourhood, with single monoliths and detached circles of small stones, scarcely visible amid the thick covering of grass and heath, but indicating, in all probability, the sites of ancient dwellings of the cairn-builders. An interesting natural chronometer is of frequent occurrence in connexion with these rude memorials of primitive habits, furnishing unmistakable evidence of the remoteness of the era to which they belong, and supplying data which may hereafter prove to be reducible to definite computation. The accumulation, not only of alluvium, but of peat-moss over the structures of early art, has already been referred to in describing the ancient boats, harpoons, &c., discovered in various localities. It will repeatedly recur in the course of our inquiry in relation to various classes of memorials of the past. The traveller, in passing from Bunaw Ferry, on Loch Etive, to Beregonium, Argyleshire, passes over an extensive moor, known by the name of the "Black Moss." On this, or rather rising up through it, are several large cairns, with here and there the remains of others which have been demolished for the purpose of inclosing fields or building cottages. In various parts considerable portions of the moss have been cleared away, exposing, at a depth of from eight to ten feet, the original soil upon which these sepulchral mounds have been reared, and bringing to light other interesting memorials of their builders, hereafter referred to. With such evidence of the slow growth of centuries obliterating the traces of primitive occupation, and effecting such changes on the natural features of the country, it is no vague conjecture which refers to an early era the period when this wild and barren moor was the scene of life and intelligence, and, it may be, of many useful arts. Along with these may be mentioned another group of cairns, including one of unusually large dimensions, not inclosed by the gathered moss of ages, but surrounded by the encroaching tide, on the north shore of the Frith of Beauly, Ross-shire,

affording no less striking, though diverse evidence of the remote era to which they belong. In one of these sepulchral urns have been found, leaving no room to doubt of their monumental character. The largest stands about 400 yards within flood-mark; and an ingenious writer in the Philosophical Transactions arrives at the conclusion that an area of fully ten miles square, now flooded by the advancing tide, has once been the site of the dwellings of the ancient cairn-builders. Thus is it, while Time is sweeping away the hoar relics of the past, the traces of his footprints enable us occasionally to return upon his track, and learn how great is the interval that separates our present from the era of their birth-time.

Ure, in his History of Rutherglen and Kilbride, furnishes interesting notices of various large cairns demolished during last century, some of which have already been referred to. One of these, which long served as a quarry for an extensive district of the latter parish, was termed Knocklegoil Cairn,—*Knoc-kill-goill*, the hill of the cell, or grave, of the strangers. Some thousands of cart-loads of stones were taken from it, in the course of which various cinerary urns were removed or destroyed.

Another, called Herlaw, (the memorial mound,) was of still larger dimensions. "Some thousand cart-loads of stones have, at different times, been taken from it; and some thousands yet remain. Many urns with fragments of human bones were found in one corner of it. It is still about twelve feet in height, and covers a base of seventy feet in diameter; but this must have been far short of its dimensions when entire."[1] The name of this gigantic cairn is still attached to the farm of Harelaw, on which it stood, but the last remains of the pile were removed about the year 1808, and a small group of trees now occupies its site. Such details might be multiplied to almost any amount, but one other remarkable cairn may be noted:—"On the hill above the moor of Ardoch," says Gordon, "are two great heaps of stones, the one called *Cairnwochel*, the other *Cairnlee*. The former of these is the greatest curiosity of the kind that I ever met with; the quantity of great rough stones, lying above one another, almost surpasses belief, which made me have the curiosity to measure it; and I found the whole heap to be about 182 feet in length, thirty in sloping height, and forty-five in breadth at the bottom."[2] Since these measurements were made the cairn has been opened, and within it was found a cist, containing, according to the account of the parish minister, the skeleton of a man seven feet long.[3]

As we are reasonably led to conclude that the tumuli and cairns were mostly constructed at one time, as monuments, and not gradu-

[1] Ure's Kilbride, p. 213.
[2] Itin. Septen. p. 42.
[3] Sinclair's Statistical Account, vol. viii. p. 497.

ally completed as they were filled on the death of successive members of a family or tribe, the large chambered cairns must be considered as a separate class from those first described. It is possible that they may have been designed as the catacombs of a whole tribe; though it is difficult to reconcile such an idea with the improvident habits of a rude people, and with the monumental character usually traceable in these structures. We should rather, perhaps, look upon the chambered cairn as the memorial of the victors on some bloody battle-field. On this supposition the Knoc-kill-goill, or hill of the strangers' graves, would indicate the scene where triumphant invaders had paid the last honours to their dead ere they bore off with them the spoils of victory. Such suppositions, however, are altogether apart from the facts with which we have chiefly to deal. The cromlech, which is now almost universally recognised as a sepulchral monument,[1] formed by far the most laborious and costly memorial which the veneration or gratitude of primitive ages dedicated to the honour of their illustrious dead. It consists of three or four large unhewn columns, supporting a huge table or block of stone, and forming together a rectangular chamber, which is frequently further inclosed by smaller stones built into the intervening spaces. Within this area there is generally found the skeleton, disposed in a contracted position, and accompanied with urns and relics of an early period. As the sepulchral tumulus is justly regarded as only a gigantic grave-mound, so the origin of the cromlech may be traced to the desire of providing a cist for the last resting-place of the chief or warrior, equally distinguished from that which sufficed for common dust—

> "A little urn—a little dust inside,
> Which once outbalanced the large earth, albeit,
> To-day a four-years' child might carry it!"[2]

This class of sepulchral monuments is rare in Scotland when compared with other monolithic structures that abound in almost every district of the country. Some few interesting examples, however, are still found perfect, while partial traces of a greater number remain

[1] This point has been conclusively established in the valuable communications of Mr. F. C. Lukis to the Archæological Journal, *on the Primeval Antiquities of the Channel Islands*, vol. i. pp. 142, 222. The original merit, however, of showing that cromlechs are "sepulchral chambers," and not "Druidical altars," is, I believe, due to a well-known and zealous antiquary, Mr. John Bell, of Dungannon, who published his views in the Newry Magazine, 1816, vol. ii. p. 234, from whence they were copied into various other journals.

[2] E. B. Barrett.

to show that the cromlech was familiar to the builders of the Scottish monolithic era. One of the most celebrated Scottish cromlechs is a group styled, THE AULD WIVES' LIFT, near Craigmadden Castle, Stirlingshire. It is remarkable as an example of a trilith, or complete cromlech, consisting only of three stones. Two of nearly equal length support the huge capstone, a block of basalt measuring fully eighteen feet in length, by eleven in breadth, and seven in depth.

A narrow triangular space remains open between the three stones, and through this every stranger is required to pass on first visiting the spot, if, according to the rustic creed, he would escape the calamity of dying childless. It is not unworthy of being noted, that though the site of this singular cromlech is at no great elevation, a spectator standing on it can see across the island from sea to sea; and may almost at the same moment observe the smoke from a steamer entering the Frith of Clyde, and from another below Grangemouth, in the Forth.

From the traces of ruined cromlechs which are still visible in various parts of the country, some of them appear to have been encircled, like a class of barrows described above, with a ring of standing stones; and it is exceedingly probable that many of the smaller groups throughout the country, designated temples, or Druidical circles, belong to the class of sepulchral memorials. Such is the case with a monolithic group in the parish of Sandwick, Orkney, and it is still more noticeable in the ring of Stennis, where the cromlech lies overthrown beside the gigantic ruins of the circle which once inclosed it. Various other cromlechs still remain in Orkney. One called the Stones of Vea, situated on the moor about half a mile south of the manse of Sandwick, though overthrown, is otherwise uninjured. The capstone measures five feet ten inches, by four feet nine inches, and still rests against two of its supporters. A group, which stands on the brow of Vestrafiold, appears to have included two if not three cromlechs. There is another remarkable assemblage, in a similarly ruined state, near Lamlash Bay, in the island of Arran; and a single cromlech stood —if it does not still stand—in the centre of a stone circle in the same

island.[1] A fine one also remains, in perfect preservation, on the southern declivity of the hill of Sidla, Forfarshire; another good example has been preserved on the farm of Ardnadam, in the parish of Dunoon, Argyleshire; and others, more or less complete, are to be seen at Achnacreebeg, Ardchattan, and in various districts of the West Highlands, as well as in other parts of Scotland. Some at least of these gigantic structures were buried under a tumular mound, precisely in the same manner as the smaller cists. In 1825 a cromlech was discovered on the removal of a tumulus of unusual size, situated near the west coast of the peninsula of Cantyre. It contained only the greatly decayed remains of a human skeleton, but in the superincumbent soil were found many bones, and the teeth of the horse and cow, also in a state of decay. The capstone of this cromlech measured five by four feet, and its four supporters were each about three feet high.[2] A somewhat larger cromlech was disclosed, under nearly similar circumstances, in the year 1838, on the levelling of a large mound or tumulus, in the Phœnix Park, Dublin.

The whole of these examples are constructed of rough and entirely unhewn blocks. The annexed figure represents a partially ruined cromlech, at Bonnington Mains, near Ratho, Mid-Lothian, which is interesting from some traces which it retains of artificial tooling. Along the centre of the large capstone a series of shallow perforations have been made at nearly regular intervals, and possibly indicate a design of splitting it in two. Such is the idea formed by Mr. F. C. Lukis in a somewhat parallel case, though any indication of artificial formation in such primitive structures is of the very rarest occurrence. Mr. Lukis remarks in a communication to the Archæological Association:—"I send a sketch of the cromlech on L'Ancresse Common, Guernsey, on which we have discovered a string of indentations, probably made with a view to trim the side prop to the required size of the capstone. These are the first appearances of art in any of the primeval monuments, and nowhere have we found anything of the kind excepting on a menhir in the parish of the Forest. . . . The use of these indents we can only guess at; but as they follow the fracture of the stone, (granite,) the early method of breaking stones would be explained."[3] The Bonnington Mains Cromlech is of large size. The

[1] Martin's Western Isles, p. 229.
[2] Archæol. Scot. vol. iii. p. 43.
[3] Journal of Brit. Archæol. Association, vol. iii. p. 342.

capstone, which now rests on only two of its supporters, measures 11½ feet in length, and 10½ feet in greatest breadth. It bears the name of THE WITCH'S STONE,[1] in accordance with the rustic legend

The Witch's Stone, Bonnington Mains, Mid Lothian.

which ascribes its origin to an emissary of the famed old Scottish wizard, Michael Scot. The term cromlech is probably derived from *cromadh* (Gaelic) or *cromen* (Welsh), signifying a *roof* or *vault*, and *clach* or *lech*, a stone. But the compound word is of ancient use in Scotland. An extensive district in the neighbourhood of Dunblane, Perthshire, which still bears the name of the Cromlix, is remarkable for various large transported blocks scattered over its surface. One of these, which has been supposed to have formed the capstone of a large cromlech, measures 15½ by 10 feet; but it is very doubtful if it owes either its form or position to human hands. According to the proposed derivation the name may be rendered *the suspended stone;* and its application to a district covered with transported rocks from the neighbouring Ochills, of a date long prior to the historic era, is in no way inconsistent with its more usual application to the primitive monolithic structures. We have no satisfactory evidence that these are Celtic monuments. The tendency of our present researches leads to the conclusion that they are not, but that they

[1] While this sheet is passing through the press, I have had an opportunity of exploring this cromlech. The natural rock was laid bare at a very little depth without meeting with the slightest traces of sepulchral remains, and were it not for the remarkable line of perforations along the centre of the capstone, the whole might have been ascribed to a natural origin. It was found impossible, however, to get directly under the great stone, without the risk of overthrowing the whole.

are the work of an elder race, of whose language we have little reason to believe any relic has survived to our day. On this supposition the old name of Cromlech is of recent origin compared with the structures to which it is applied; and of this its derivation affords the strongest confirmation. It is just such a term as strangers would adopt, being simply descriptive of the actual appearance of the monument, but conveying no idea of its true character as a sepulchral memorial.

Such are the monumental structures belonging to the primitive periods; but examples of the cist and cinerary urn, deposited without any superincumbent mound, are of extremely frequent occurrence. They are most commonly grouped in considerable numbers, indicating the ordinary rites of sepulture contemporary with the monumental tumulus or cairn. In the first of these, as in cists found underneath ancient cairns and tumuli, the body appears to have been generally interred in a contracted posture, with the knees drawn up to the breast; and some examples would even seem to indicate that the limb bones were broken when the body could not otherwise be disposed within the straitened dimensions which custom prescribed for the primitive tomb. The custom may be traced to the idea prevalent long after the Christian era, that it was unworthy of a warrior to die in his bed. The rude Briton was accordingly interred seated, and with his weapons of stone or bronze at his side, ready to spring up when the sound of the war-cry should summon him to renew the strife. It seems probable that some few cists of full proportions belong to a period prior to this custom, but it undoubtedly prevailed for ages, and probably did not disappear till after the introduction of Christianity. The short stone cist has been discovered of late years in the immediate vicinity of some of the most ancient Christian churches in the Orkneys, while examples of a full-sized cist, with the inclosed skeleton extended at length, are met with under circumstances, and with accompanying relics, which leave no doubt that they belong to both of the primitive periods. One singular variation from the custom of burial in the sitting posture has been noted, in which the body has been interred with the knees bent, but laid on the right side. It must, however, be at all times extremely difficult to ascertain the exact position in which the body has been originally laid, from the little crumbling heap of decayed bones lying in the contracted cist; and there is no failing to which antiquarian observers seem at present more liable

than that of seeing too much. An intelligent correspondent writes from Orkney,—

"Graves are frequently found in which the skeletons lie in various positions; in some cases as if the bodies had been huddled into the grave without any care; in others the knees are considerably bent, and the skeletons lie on the right side. Several such examples have been discovered in Sandwick; and in a grave which I recently opened in Westray, the skeleton was found on its right side in a similar posture. I examined it carefully, and it conveyed the impression to my mind that the individual had been slain in battle, and the body had been laid in the grave in the posture it was found on the field of conflict. A similar posture has been observed in skeletons found in different islands. The rude figure of a Calvary cross carved on the stone which formed a side of one of the graves in Sanday, seems to indicate that they were made subsequent to the introduction of Christianity, in the same way that a mallet-head of gneiss, beautifully polished, found at the right hand of a skeleton buried in a sitting posture in a grave in Sandwick, denoted a date prior to that era."[1] It is possible that the body laid on its right side with contracted limbs, may be found to indicate the transition-period prior to its interment at full length. The latter mode of burial appears, in England at least, to have been restored in Anglo-Saxon times, and before the introduction of Christianity.

A very general impression prevails that the primitive cists are invariably found lying north and south. But this is a hasty conclusion, which has been the more readily adopted from the distinction it seems to furnish in contrast to the medieval custom of laying the head towards the west, that the Christian might look to the point from whence he expected his Saviour at his second coming. Abundant evidence exists to disprove the universal use of any particular direction in laying the cists or interring the dead in the primitive period. A few examples will suffice to show this. In 1824 a number of cists were discovered in making a new approach to Blair Drummond House, near the river Teith, Stirlingshire. They were of the usual character, varying in size, but none of them large enough to hold a full-grown body laid at length. Some contained urns of various dimensions, with burnt bones and ashes, while in others the bones had no appearance of having been exposed to fire. The urns were extremely rude and simple in form, and no metallic relics were discovered among them. Here, therefore, we have a primitive place of sepulture, in a locality already noted for some remarkable evidences of very remote population. But the cists lay irregularly in various directions, giving no indication of any chosen mode or prevailing custom.[2] In 1814 several cists were discovered

[1] MS. Letter, George Petrie, Kirkwall.

[2] Archæol. Scot. vol. iii. p. 42.

in the parish of Borthwick, Mid-Lothian, of the ordinary character and proportions, and in some cases containing urns, one of which is now in the Museum of the Society of Antiquaries of Scotland. Others have since been discovered in the same neighbourhood at various times, but like those on the banks of the Teith, "they were placed without any regard to order."[1] In constructing the new road to Leith, leading from the centre of Bellevue Crescent, Edinburgh, in 1823, several stone cists were found, of the usual circumscribed dimensions and rude construction of the primitive period, but being disposed nearly due east and west, were assumed without further evidence to be "of course since the introduction of Christianity."[2] Another similar relic of the aboriginal occupants of the site of the modern Scottish capital was found in 1822, in digging the foundation of a house on the west side of the Royal Circus. In this case the cist lay north and south, but the head was laid at the south end. The whole skeleton, with the exception of a few of the teeth, crumbled to dust on being touched.[3] In a cist discovered in 1790, under a large cairn in the parish of Kilbride, the skeleton lay with its head to the east. Such was its great age, that it also speedily crumbled to dust.[4] Within the district of Argyleshire, now occupied by the villages of Dunoon and Kilmun, many primitive cists have been exposed, rudely constructed of unhewn slabs of the native schistose slate, and some of them containing lance and arrow-heads of flint, and other equally characteristic relics, but the irregularity of their disposition proved that convenience alone dictated the direction in which the bodies were laid. Other examples of irregular though methodic arrangement of the cists found in cairns have already been noted, and it would be easy to multiply similar instances. One more will suffice. In the neighbourhood of the parish church of Cairnie, Aberdeenshire, various cists have been exhumed of late years, lying in different and apparently quite irregular directions. One found in 1836, by a farm-servant while digging for sand, lay at a depth of about 2½ feet below the surface. Its interior dimensions were four feet by three feet, and it contained a human skeleton with the head laid towards the east end. At the right side was a rude hand-made urn 5¾ inches in height, which is now preserved in the Museum of the Scottish Antiquaries.

It is obvious, from these examples, that the mere direction in which

[1] Archæol. Scot. vol. ii. pp. 77, 100.
[2] Archæol. Scot. vol. iii. p. 49.
[3] Archæol. Scot. vol. iii. p. 48.
[4] Ure's Kilbride, p. 213.

the body is laid is not in itself conclusive proof either of Pagan or Christian sepulture. But there does also occur a numerous class of instances, which seem to indicate that at some early period importance was attached to the direction in which the body was laid, and then the cist was placed north and south, or rather north-east and south-west, with the head towards the north, and designed, it may be, to look towards the meridian sun. So many instances of this are familiar to archæologists, that it seems hardly necessary to produce examples: but two of a peculiar character may be deserving of special notice. In March 1826, a farmer on the estate of Wormeston, near Fifeness, in levelling a piece of ground, discovered, at a depth of ten feet from the surface, thirty cists, disposed in two regular rows, at equal distances apart, and with the heads towards the north-east. Their arrangement was peculiar, and obviously the result of some special design. A line drawn along their ends was nearly due east and west, and from this they declined obliquely, in the direction of north-east and south-west. The whole lay parallel, and equidistant from each other, and in the centre of each of the intervening spaces an oblong stone was placed so as to abut against the sides of the adjacent cists.[1] Another group, disposed nearly similarly to this, was brought to light on the levelling of a long barrow of unusually large dimensions, in the parish of Strathblane, Dumbartonshire. Urns were found within the cists full of earth and burnt bones; and alongside of each was a column of about three feet in height, selected from basaltic rocks in the neighbourhood, many of which assume the form of regular quadrangular crystals.* The position of the bodies appears to have been north and south, as the barrow, which measured sixty yards in length, lay east and west.[2]

The discovery of any important deviation from the customary rites of sepulture has already been referred to as probable evidence of some unwonted change in the social condition of a people; marking, it may be, the introduction of a new element into the national creed, or the violent intrusion of some foreign race of conquerors, displacing older customs by the law of the sword. In the introduction of the funeral pile and the cinerary urn, we have one important evidence of the adoption of novel rites. In the systematic disposition of the body in a fixed direction, it is probable that we may trace another and

[1] MS. Letter, G. W. Knight, Libr. Soc. Antiq. Scot. 1829.

[2] Ure's Rutherglen, p. 223.

still earlier change. Both practices are deserving of more careful investigation than they have yet received, in the relation they bear to the progressive advances of the primitive races of Scotland. Without the opportunity of comparing more extensive and trustworthy observations than we yet possess, it would be premature to insist upon the inferences suggested by them. But it accords with many other indications that we should find less method or design in the rude sepulchres of the earliest aborigines, than of those who had long located themselves in the glades of the old Caledonian forests, and abandoned nomadic habits for the cares and duties of a pastoral life. The establishment of such a distinction would furnish a valuable chronological guide to the archæologist in the arrangement of his materials for primitive history; meanwhile, it is only suggested for further observation. The early Christian adapted the position of his grave to the aspirations of his faith; and a similar practice among older races, in all probability, bore a kindred relation to some lesson of their Pagan creed, the nature of which is not yet perhaps utterly beyond recall. The question of divers races is, at least, one of comparatively easy solution. On this the investigations of the practical ethnologist may throw much light, by establishing proofs of distinct craniological characteristics pertaining to the remains interred north and south, from those belonging, as I conceive, to a still earlier period,—before the rude Caledonian had learned to attach a meaning to the direction in which he was laid to rest in the arms of death, or to dispose himself for his long sleep with thoughts which anticipated a future resurrection.

CHAPTER IV.

DWELLINGS.

BEFORE proceeding to examine in detail the varied contents of the Scottish tumuli, it may be well to glance at the evidence we possess of the nature of the habitations reared and occupied by the constructors of such enduring memorials of their dead as have been described in the preceding chapter. Scattered over the uncultivated downs both of England and Scotland, there still remain numerous relics of the dwellings of our barbarian ancestry, which have escaped the wasting tooth of centuries, or the more destructive inroads of modern cultivation. Sir Richard Colt Hoare remarks, in his "Ancient Wiltshire,"—"We have undoubted proofs from history, and from existing remains, that the earlier habitations were pits, or slight excavations in the ground, covered and protected from the inclemency of the weather by boughs of trees and sods of turf." Of these primitive pit-dwellings numerous traces are discernible on Leuchar Moss, in the parish of Skene, and in other localities of Aberdeenshire; on the banks of Loch Fine, Argyleshire; in the counties of Inverness and Caithness; and in various other districts of Scotland still uninvaded by the plough. They are almost invariably found in groups, affording evidence of the gregarious and social habits of man in the simplest state of society. The rudest of them consist simply of shallow excavations in the soil, of a circular or oblong form, and rarely exceeding seven or eight feet in diameter. Considerable numbers of these may be observed in several districts both of Aberdeenshire and Inverness-shire, each surrounded with a raised rim of earth, in which a slight break generally indicates the door, and not improbably also the window and chimney of the aboriginal dwel-

ling. To this class belong the "pond barrow," already referred to as erroneously ranked among sepulchral constructions. Within a few miles of Aberdeen are still visible what seem to be the remains of a large group, or township, of such rude relics of domestic architecture. These, Professor Stuart suggests, may mark the site of the capital of the Taixali, when the Roman legions passed the river Dee in the second century.[1] They consist of some hundreds of circular walls scattered over more than a mile in extent, of two or three feet high, and from twelve to twenty feet in diameter. Their varying sizes may be presumed to indicate the gradations of rank which, we know, were established among the northern Britons, who were undoubtedly, at the period of the Roman invasion, a race far in advance of the first constructors of the rude pit-dwelling or "pond barrow" previously referred to. Nothing, however, has yet been discovered on this site to indicate any traces of Roman influence. On digging within the area of the pit-dwellings, a mass of charred wood or ashes, mingled with fragments of decayed bones and vegetable matter, are generally found; and their site is frequently discernible on the brown heath, or the grey slope of the hill-side, from the richer growth and brighter green of the grass, within the circle sacred of old to the hospitable rites of our barbarian ancestry, and where the accumulated refuse of their culinary operations have thus sufficed to enrich the soil.

The first indication of a slight advancement in the constructive skill of the primitive architect is discernible in the strengthening of his domestic inclosure with stone. This is not infrequently accompanied with small circular or oblong field inclosures, as if indicating the dawn of civilisation, manifested in the protection of personal property, and the rudiments of a pastoral life, in the folding of sheep and cattle. Still greater social progress would seem to be indicated in those examples, also occasionally to be met with in various districts, where a commanding site appears to have been chosen for the location; and traces still remain of an earthen rampart inclosing the whole, as on the Kaimes Hill, in the parish of Ratho, Mid-Lothian. Such, perhaps, may be the remains of a British camp, or of a temporary retreat in time of war.

With this class also may be grouped the "Picts' kilns," on which Chalmers, Train, Sir Walter Scott, and other antiquaries, have expended much conjecture and useless learning. These are of frequent

[1] Archæol. Scot. vol. ii. p. 54.

occurrence in Wigton and Kircudbright shires, as well as in parts of the neighbouring counties. They consist of elliptical or pear-shaped inclosures, measuring generally about sixteen feet in length and seven or eight feet in breadth. Externally the walls appear to be of earth, sometimes standing nearly three feet high. On removing the surface they are found to be constructed internally of small stones, frequently bearing marks of fire. They are popularly believed to be ancient breweries reared by the Picts for the manufacture of a mysterious beverage called *heather ale.* Sir Walter Scott suggests, with not much greater probability, that they are primitive lime kilns. They are said by Mr. Train to be invariably constructed on the south side of a hill, close to the margin of a brook, and with the door or narrow passage facing the stream. Future excavations on their sites may perhaps furnish more conclusive evidence of their original purpose.

Greater art is apparent in the relics of another class of ancient Scottish dwellings occasionally met with in different parts of the country. In the Black Moss, already referred to, on the banks of Etive, Argyleshire, at various points where some advance has been made in recovering the waste for agricultural purposes, the progress of cultivation has uncovered rough oval pavings of stone, bearing marks of fire, and frequently covered with charred ashes. These are generally found to measure about six feet in greatest diameter, and are sometimes surrounded with the remains of pointed hazel stakes or posts, the relics, doubtless, of the upright beams with which the walls of the ancient fabric was framed. Julius Cæsar describes the dwellings of the Britons as similar to those of the Gauls ;[1] and these we learn, from the accounts both of Strabo and Diodorus Siculus, were constructed of wood, of a circular form, and with lofty tapering roofs of straw. Such apparently were the structures, the remains of which are now brought to light within the limits of the Dalriadic possessions. These ancient Caledonian hearths, now quenched for so many centuries, are discovered beneath an accumulation of from eight to ten feet of moss, under which lies a stratum of vegetable mould about a foot deep, resting upon an alluvial bed of gravel and sand; the original soil upon which the large sepulchral cairns of the same district have been reared.

A discovery made at Dalgenross, near Comrie, in 1823, though de-

[1] Bell. Gall. lib. v. c. xii.

scribed in a communication to the Society of Antiquaries of Scotland as an ancient tomb, manifestly furnishes another example of the same class of primitive dwellings. At Comrie, as in twenty other equally probable localities, antiquaries of the district have pronounced some imperfect and half-obliterated earth-works to be the remains of a Roman camp, and the scene of Agricola's famous victory of Mons Grampius! The writer, learning that workmen were trenching this interesting spot, remarks,—"I hastened to where the men were at work, and found that they had come upon a circle of flat stones set on edge, and at the bottom a paving of large flag-stones. The cavity was filled with a kind of black earth, pieces of charred wood, and also some fragments of iron, but so completely defaced with rust that it is impossible to say to what purpose they have been applied." On pursuing the investigation further, pieces of charcoal and burned wood were found, along with charred wheat, which might possibly suggest its having been a granary; but its general characteristics much more nearly assimilate it to a native dwelling, to which, it may be, the torch of the Roman legionary applied the brand that reduced it to a blackened ruin.

Among the relics of primitive domestic architecture brought to light in later times, no class is more remarkable than the *weems*, or subterranean dwellings which have been discovered in different parts of Scotland. Of this class are two structures discovered under ground in the parish of Tealing, Forfarshire. One of them consisted of several apartments formed with large flat stones without any cement; and in it were found wood-ashes, several fragments of large earthen vessels, and an ancient stone hand-mill, or querne. The other was a single vault constructed in the same manner, measuring internally about four feet both in height and width, and in which were found a broad earthen vessel, and a stone celt or hatchet.[1] In another opened in the parish of Monzie, Perthshire, a stone celt and bronze sword were found, both of which are preserved at Monzie House. Chalmers supplies a curious list of similar subterranean dwellings discovered at various times in Forfar, Perth, Aberdeen, Ross, Sutherland, and Inverness shires, and in the Orkney Islands.[2] The like structures are noted by Martin, among the antiquities of the islands of Walay, Erisca, and Skye;[3] and by Pennant also in the latter island. They are de-

[1] Sinclair's Statist. Acc. vol. iv. p. 101.

[2] Caledonia, vol. i. p. 97. *Vide* also New Stat. Acc. vol. vii., Renfrewshire, 502, &c.

[3] Martin's Western Isles, pp. 67, 87, 154.

scribed by Martin as "little stone-houses, built under ground, called *earth houses*, which served to hide a few people and their goods in time of war."

The general name applied in Scotland to these subterranean habitations is Weems, from the Gaelic word *uamha*, a cave; and as this name is in use in the low countries, where nearly all traces of the Celtic dialect have been lost as a living language, probably since the era of the "Saxon Conquest," it may be accepted as no insignificant evidence of their Celtic origin or use. In Aberdeenshire, where they have been found in greater number than in any other single district, they are more generally known, as in the Hebrides, by the name of *eirde* (i.e., *earth*) *houses*.

An interesting account of a large group of weems discovered in Aberdeenshire, is given by Professor Stuart in the Archæologia Scotica,[1] and since then many more have been brought to light in the same district. Several of these opened of late years in Strathdon are described with great minuteness in the Statistical Account of that parish.[2] On a bleak moor in the adjoining parish, not far from the old castle of Kildrummie—which, from many large fossil trees dug up in it, appears to have once been an extensive forest—the largest assemblage of these singular habitations occurs which has yet been discovered in Scotland. Others have been found about six miles further up the country, at Glenkindrie, at Buchan, and near the source of the Don, one of the wildest districts of the Highlands. They are indeed scarcely less common than the sepulchral cairn. My object, however, is not so much to accumulate numerous examples, as to select a few characteristic types of each class of Scottish antiquities; though these weems appear to possess peculiar claims to minute description, from their very frequent occurrence. In general, no external indication affords the slightest clue to their discovery. To the common observer, the dry level heath or moor under which they lie presents no appearance of having ever been disturbed by the hand of man; and he may traverse the waste until every natural feature has become familiar to his eye, without suspecting that underneath his very feet lie the dwellings and domestic utensils of remote antiquity.

The Aberdeenshire weems are constructed of huge masses of granite, frequently above six feet in length, and though by no means

[1] Archæol. Scot. vol. ii. p. 52. [2] New Statist. Acc. vol. xii. p. 545.

uniform either in internal shape or dimensions, a general style of construction prevails throughout the whole. Some of them have been found upwards of thirty feet long, and from eight to nine feet wide. The walls are made to converge towards the top, and the whole is roofed in by means of the primitive substitute for the arch which characterizes the cyclopean structures of infant Greece, and the vast temples and palaces of Mexico and Yucatan. The huge stones overlap each other in succession, until the intervening space is sufficiently reduced to admit of the vault being completed by a single block extending from side to side. They have not infrequently smaller chambers attached to them, generally approached by passages not above three feet in height; and it affords a curious evidence of the want of efficient tools in the builders of these subterranean structures, that where these side apartments are only separated from the main chamber by the thickness of the wall, the stones, though placed flush with the walls of the latter, project irregularly into the small cells, giving them a singularly unshapely and ragged appearance. Similar structures, but of smaller dimensions, have been discovered in Lanarkshire, at Cartland Craigs, in the neighbourhood of Stonebyres, and at a place called Cairney Castle. In these last were found quernes, deers' horns, and bones. In one uncovered in the parish of Auchterhouse, Forfarshire, a brass ring was discovered; and both there, and in another in the same parish, were ashes, bones, and quernes.[1] The Rev. Thomas Constable furnishes a very interesting description of one near Lundie House, in the latter county, which was minutely surveyed by the eminent antiquary, Lord Hailes. Its contents were of the usual description, including several quernes about fourteen inches in diameter.[2] So also, in a minute account of similar structures in Caithness and Sutherland, furnished to Pennant by the parish minister of Reay, the writer remarks:—"We found in them nothing but hand-mills, or what the Highlanders call quernes, which were only eighteen inches in diameter, and great heaps of deers' bones and horns, as they (the Picts) lived much more by hunting than any other means."[3] The discovery, indeed, of the primitive hand-mill in these ancient dwellings is so frequent as to be worthy of special notice, and might seem to indicate that their original destination had been for store-houses or granaries, did not the constant occur-

[1] Sinclair's Statist. Acc. vol. xiv. p. 526.
[2] Sinclair's Statist. Acc. vol. xiii. p. 117.
[3] Pennant's Tour, vol. i. Appendix, p. 339.

rence of the bones of domestic animals, or of those most prized in the chase, and frequently in considerable quantities, leave no room for doubt that they must have been occupied as places of habitation. They agree very nearly with the description furnished by Tacitus of the winter dwellings of the Germans, whom he represents as digging caves in the earth, in which they lay up their grain, and whither they retire in the winter, or on the advance of an enemy to plunder the open country.[1] The entrance to such of these subterranean dwellings as have been found sufficiently perfect to afford indications of their original character, appears to have generally been by a slanting doorway between two long, upright stones, through which the occupant must have slid into his dark abode. Occasionally a small aperture has been found at the further end, apparently to give vent to the fire, the charcoal ashes of which lie extinguished on the long-deserted floor. In some a passage of considerable length has formed the vestibule; but so far as now appears, a solitary aperture served most frequently alike for doorway, chimney, ventilator, and even window, in so far as any gleam of daylight could penetrate into the darkened vault. One is forcibly reminded, while groping in these aboriginal retreats, of Elia's realisations of the strange social state to which they pertain, in his quaint rhapsody on Candle-light, "*our peculiar and household planet!* Wanting it, what savage unsocial nights must our ancestors have spent, wintering in caves and unilluminated fastnesses! They must have lain about and grumbled at one another in the dark. What repartees could have passed, when you must have felt about for a smile, and handled a neighbour's cheek to be sure that he understood it! This accounts for the seriousness of the elder poetry. It has a sombre cast, derived from the tradition of these unlanterned nights!" The grave humorist goes on to picture a supper scene in these unlighted halls, rich with truthful imaginings, mingled with his curious but thoughtful jests:—

> "Things that were born, when none but the still night,
> And his dumb candle, saw his pinching throes."

In truth, these dwellings, constructed with such laborious ingenuity in every district of Scotland, seem to throw a strange light upon that dim and remote era to which they belong, giving us some insight into the domestic habits and social comforts of a period heretofore dark as their own unillumined vaults.

[1] De Moribus Germanorum, c. 16.

Adjoining many of the weems small earthen inclosures are discernible; some of which are square, measuring about fifteen paces each way, with the area somewhat below the surrounding soil, and have probably been constructed for folding sheep or cattle. Others are circular, and so small as to leave little doubt that there must have stood the slight huts, constructed of turf and branches of trees, in which the architect of the cyclopean structure dwelt during the brief warmth of summer, while he sought refuge from the frosts and snows of our northern winter in the neighbouring subterranean retreat. The number of weems frequently found together appears altogether inconsistent with the idea of their construction as mere places of concealment. They are manifestly the congregated dwellings of a social community, though strangely differing from any that have dwelt in the land within the era of authentic history. When we compare these dwellings with the clay huts still common in many a Highland district, or with such humble Lowland biggings as those which have won a new sacredness as the birthplaces of Hogg or Burns, it is impossible to overlook the remarkable differences presented by the two states of society, separated not more widely by time than by variance of habits and ideas. How striking is the contrast between the artlessness of the Ayrshire cottage, that sufficed, with its straw roof, to satisfy the wants of one among the great master-spirits of all times, and the labour and ingenuity expended in producing these retreats of the Scottish aborigines. In rudeness of result perhaps both are on a par. The ingenious and methodic skill, however, entirely belongs to the old builders. Their mode of constructing with huge unhewn stones, frequently brought from a considerable distance, seems to point them out as the architects of that same remote era in which the rude monumental standing stones and circular groups of monoliths were reared, which still abound in so many districts of the Scottish mainland and surrounding isles.

Similar subterranean structures have been discovered at different times in Orkney, some of them of considerable extent, and including various recesses and chambers branching off from the chief central apartment. An unusually minute and interesting account of one in the parish of Shapinshay is given in the Old Statistical Accounts,[1] by the Rev. Dr. George Barry, the historian of Orkney, in which was found a beautiful torquated ring, evidently of primitive workmanship.

[1] Sinclair's Stat. Acc. vol. xvii. p. 237.

Structures of the same character, on the mainland of Orkney, were explored by Lieutenant F. W. L. Thomas, R.N., while engaged in the Admiralty Survey in 1848. In the course of his investigation of one of these at Savrock, about a mile to the westward of Kirkwall, and close to the sea-shore, some curious evidence was disclosed, showing the primitive arts of its builders, and their inability to overcome an obstacle requiring unusual skill or effective tools. In excavating the site for this subterranean dwelling they appear to have cleared away the soil till they reached the natural rock, which forms the floor of the vault. Pillars constructed at irregular intervals admit of the whole being covered by immense slabs resting on them, where the width is too great to be overarched at so slight an elevation by converging walls. A long passage leads from this chamber, floored, like it, with the natural rock. In one place, however, an irregular elevation of the strata occurs. Such an obstacle was either beyond the skill of the laborious architects, or at least demanded more exertion than they cared to expend on its removal; and the roof has accordingly been elevated so as to admit of free passage by ascending and descending over the superimposed rock. The passages, as in nearly all the structures of this class which have been carefully explored, are extremely straitened. Unfortunately this primitive dwelling supplied materials for building a neighbouring farm-house and offices before Lieutenant Thomas had an opportunity of exploring it; so that what remained was in a very imperfect and dilapidated state. Portions of the roof still entire, constructed of huge masses of unhewn stone —one of them measuring about five feet long—afforded abundant evidence that no amount of mere physical labour was grudged in the completion of the edifice, and seem to justify the probable assignment of it to a period prior to the introduction of metallic tools. In another of these subterranean buildings, however, situated on the Holm of Papey, Lieutenant Thomas observed some doubtful indications of the use of tools. "On the side wall, near the entrance," he remarks, "and about six feet from the floor, there is a neatly engraved circle, about four inches in diameter; there is also another stone, with the appearance of two small circles touching each other, cut upon it; but it is so common to find geometrical figures upon the Orkney flags, arising from a semi-crystallization of the pyrites which they contain, that I am unable to decide whether these are natural or not." The height of the passage where it remains perfect is only two

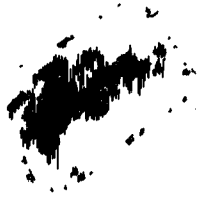
feet seven inches; but nearly one-half of it is unroofed, and heaps of large stones lying scattered about afford evidence of the great extent of the building when complete. Within and around the area of this ancient structure abundant indications were discovered of its having been used as a dwelling-place. A large accumulation of wood or peat-ashes shewed that it must have been occupied for a lengthened period; and this was further proved by the great quantity of the bones of domestic animals scattered about the place. Those of sheep, apparently of the small northern breed still found in Orkney, were the most numerous; but besides these, there were skulls and bones of horses and oxen, the skull and portions of the horns of a deer, and a large bone of a whale. A thick layer of the shells of the periwinkle, *L. Littoralis*, covered the building and the adjacent ground, mixed sparingly with the oyster, the escallop, the common whelk, and other edible mollusca, which had evidently been consumed in great quantities on the spot. Along with these were also found a few extremely rude implements, the relics of the primitive arts of the builders, besides an antler of a deer artificially severed from the complete tyne. These objects were roughly fashioned from the thigh-bone of an ox, and designed apparently as handles for some weapon or cutting implement, most probably of shell or flint. Other Orkney relics of the same interesting class, but exhibiting more completeness of design, and accompanied with attempts at ornament, are described and figured in a subsequent chapter.

This large, though very imperfect example of the dwellings of primitive communities of the ancient population of the Orkneys, may be properly classed with the weems of the Scottish mainland, though it is not entirely subterranean. The floor is nine feet below the natural surface of the ground; and from the mode by which the whole appears to have been inroofed with immense overlapping stones, it must have projected somewhat above the surface, and was probably covered over with a raised mound of earth. In this respect it approaches, in some degree, to another class of buildings, which appear to be peculiar to Orkney and the neighbouring districts of Caithness and Sutherland, though it is possible enough that they may have been at one time no less common on the whole Scottish mainland. These structures, for which it may be convenient to retain the popular name of *Picts' houses*, are not strictly speaking, subterranean, but erected generally on the level ground, or, at furthest, excavated in part out of the side of a hill,

so as to admit of a level entrance. Externally they are scarcely distinguishable from the larger tumuli, but on digging into the green mound it is found to cover a series of large chambers, built generally with stones of considerable size, and converging towards the centre, where an opening appears to have been left for light and ventilation. These differ very little from many of the subterranean weems, excepting that they are erected on the natural surface of the soil, and have been buried by means of an artificial mound heaped over them. Barry has minutely described one, which he calls an "ancient Pict house," opened at Quanterness, near Kirkwall.[1] Another relic of the same class was explored during the past year by Mr. George Petrie of Kirkwall, to whose valuable communications on kindred subjects I have already had occasion to refer. Through his kindness I have been favoured with a minute account of the result of his labours, as well as with the plans engraved, drawn from careful measurements taken at the time.

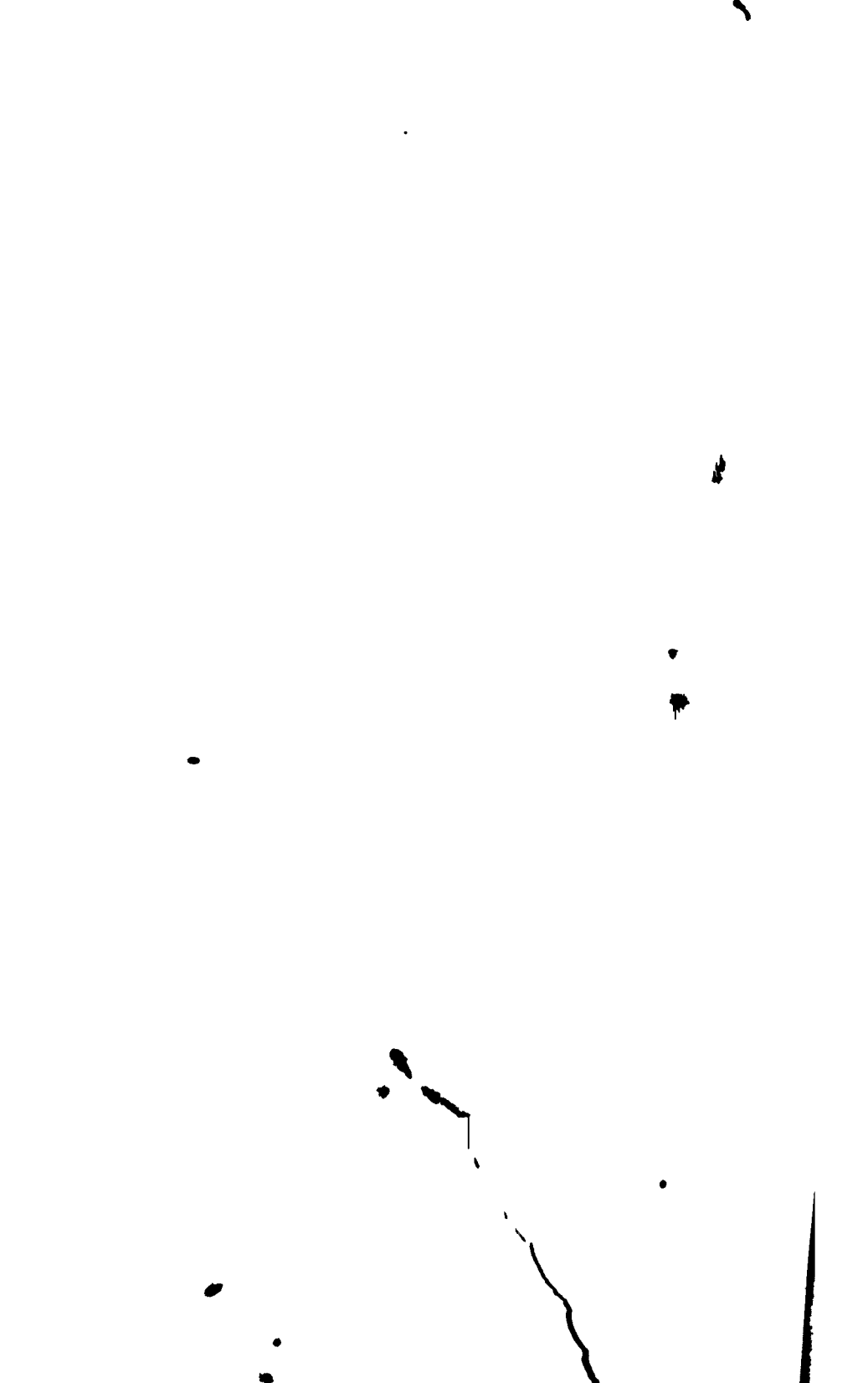
In the month of October 1849, Mr. Petrie's attention was directed to a large tumulus or green knoll, which stands about half-way up the western declivity of Wideford-hill, overlooking the beautiful bay of Firth on the mainland of Orkney, and within a short distance of the Pict's house of Quanterness, described in Barry's History of Orkney. Being on a steep and unfrequented part of the hill, it appears to have almost entirely escaped observation. An opening, however, had been attempted at some former period, but abandoned after an excavation of about a couple of feet in depth had been effected. Mr. Petrie employed men to make a section into the mound, and himself superintended and assisted in the operation, which proved one of considerable time and labour, from the large stones and the quantity of clay used in completing the external mound, as well as in the masonry of the structure found underneath. The building appears to have been constructed in the following manner:—A place for the site having been scooped out of the side of the hill, the cells or apartments were built of large unhewn stones, the walls being made gradually to converge as they rose in height, until they approached to within a foot at top. Externally the work was bounded by a wall of about two feet high. The entire structure was then brought to a conical shape with stones and clay; the stones being disposed with considerable regularity, and over all a thick layer of turf or peat had been laid. The mound which encloses the whole is about one hundred and forty

[1] History of Orkney, p. 99.



A
C
Section showing direction of Spectacle AA C & entrance passage at A
B
A
D
Section showing Position entrance A A passage from A to C & D
Section of Spectacle C A B also Section of C A B
North
Natural Rock

CLARKE, CLIMBERS & [illegible] HILL, SURREY. Excavations 1948



feet in greatest circumference, and forty-five feet in diameter. The work of exploration was commenced by making a cut, six feet in breadth, upon the north side, and clearing away the stones and clay in the direction of the highest part of the mound. On penetrating towards the centre, at about six feet from the top, a stone was exposed placed on edge, about eighteen inches long and nine inches thick, underneath which lay another, which was found to cover a hole of about a foot square, at the top of the chamber marked D in the plan. (*Plate* I.) On obtaining entrance to this chamber or cell, it proved, like those subsequently opened, to be constructed with walls gradually converging on all sides towards the top, and to measure five feet nine inches in length from north to south, four feet eight inches in breadth, and five feet six inches in height. On the west side of the chamber, the small passage, marked *h*, was observed appearing to communicate with another apartment, but it was so blocked up with stones and rubbish, that excavation had to be resumed from the exterior. After working for upwards of an hour, the large stone, marked *m*, was reached, and on removing it an entrance was effected into the central chamber A. This was about three-fourths filled with stones and rubbish, heaped up under the opening marked *i*, on digging into which bones and teeth of the horse, cow, sheep, boar, &c., were discovered mixed with the rubbish, and also some which were supposed to be those of deer, but not a vestige of human bones.

The general plan will convey the best idea of the form and arrangement of the chambers. The central apartment, A, is an irregular oblong vault, ten feet long, five feet in greatest width, and 7½ feet in height from the bottom to the lower edge of the stones marked *o o*. Above this extends the opening *i*, which had no other covering than the outer layer of turf. Mr. Petrie came to the conclusion, after a thorough examination of the whole, that the rubbish found in this large chamber was the debris of some later building erected above the mound, the materials of which must have been precipitated through the narrow opening, as no part of the subterranean structure was found imperfect with the exception of the passage *g*. From the floor of the chamber to the extreme height of the mound is twelve feet. At the north end of the central chamber the passage *e* leads to the cell C, measuring five feet seven inches long, four feet wide, and six feet high. From the east side of this a passage extends a considerable way, until it is abruptly terminated by the native rock. The cham-

ber D, which was first entered, communicates with the central apartment by a short passage *h*, directly opposite to which is the long gallery *b*, which formed the entrance to the building from the western side of the mound. A third passage, *a*, proceeds in an oblique direction from the central chamber to a cell B, the proportions of which are six feet in length, three feet seven inches in width, and 6½ feet in height. Nothing found in this or any of the previously explored "*Picts' houses*" gives the slightest countenance to the idea that they were designed as places of sepulture. The most remarkable feature about them, however, and the one least compatible with their use as continuous dwelling-places, is the extremely circumscribed dimensions of the passages. The whole of them measure about fifteen inches in height by twenty-two inches in breadth, so that entrance could only be obtained by crawling on the ground. The arrangement affords a very striking confirmation of the barbarous state of the people, who were yet capable of displaying so much skill and ingenuity in the erection of these cyclopean structures. It is curious indeed that as civilisation progressed, primitive architecture became not only simpler but meaner, the ingenious builder learning to supply his wants by easier methods; while also the gregarious social ties which such laborious and extensive structures indicate were exchanged for the more refined separation into families, with, as we may assume, the gradual development of those virtues and affections which flourish only around the domestic hearth.

The first step in the descending scale indicative of the abandonment of the cyclopean architecture for simpler and less durable modes of construction, appears in a class of dwellings of similar character to the "*Picts' houses,*" but inferior in their masonry, and generally smaller in size and less complete in design. Examples of this class have also been found in various parts of Scotland. They are generally more entirely subterranean than the "Picts' houses," partaking in this respect more of the character of the weems. They occupy, however, an intermediate position, being excavated for the most part in the side of a hill, so as to admit of an entrance level with the ground. They are also found more frequently in groups, and have probably been each the dwelling-place of a single family.

In these oaken rafters appear to have supplied the place of the more ancient cyclopean arch, and the walls are generally built of smaller stones. Weems of this more fragile character have been

discovered at Prieston, near Glammis, in Forfarshire; at Alyth and Bendochy, Perthshire; and at Pennycuick, Mid-Lothian, as well as in other districts. One in particular, found at Alvie, Inverness-shire, measured sixty feet in length. These may be regarded as works of a later age than the more massive and enduring structures previously described, when the domestic habits of the old builders had survived their laborious arts and monolithic taste. One of the most singular groups of this latter class is a series of contiguous excavations, on the ridge of a hill immediately to the north of Inchtuthill, Inverness-shire, known in the district by the name of "the steed's stalls." Seven circular chambers are cut in the side of a steep bank, separated by partitions of about twelve feet thick. The floors are sunk about twenty feet, and each chamber measures fifteen feet in diameter. A long passage of about four feet wide has formed the original way of ingress, but the rafters, which most probably formed the roof, have long since disappeared, and only a very partial estimate can now be formed of the appearance presented by these singular chambers when complete.

With the same class also may be reckoned certain structures described by Pennant as the repositories of the ashes of sacrifices. One of these, within a few miles of Edinburgh, in the neighbourhood of Borthwick Castle, was brought to light by the plough coming in contact with its rough masonry, at a depth of only a foot below the surface. It may be described as pear-shaped, and with a passage continuing from the narrow end, measuring fifteen feet in length by two and a half in breadth. The masonry was of the rudest description, and nearly the whole space between the walls was filled with a rich black mould, irregularly interspersed with charcoal, fragments of bone, and the teeth of sheep and oxen.[1] A similar building was discovered about the same time in the east of Fife, and one closely corresponding to it has recently been disclosed by railway operations at Newstead, in the neighbourhood of Melrose. In this, as in the example above referred to, the narrow passage pointed nearly north-west; and its masonry was equally rude; but among its contents were various carved stones, apparently corresponding with Roman remains frequently found in that neighbourhood, and one in particular with the cable-pattern, or woollen fillet, so commonly employed by the Anglo-Roman sculptors.

[1] Pennant's Tour, vol. iii. p. 454.

Akin to such subterranean dwellings are the natural and artificial caves which, in Scotland, as in most other countries, have supplied hiding-places, retreats for anchorites, and even permanent native dwellings, and may be described along with this class, though belonging to many different periods. Such caves abound in Scotland, and especially along the coast, but in general their interest arises rather from the associations of popular traditions, than from any intrinsic peculiarity of character pertaining to them. Few such retreats are more remarkable, either for constructive art, or historic associations, than the well-known caves beneath the old tower of Hawthornden, near Edinburgh. They have been hewn, with great labour and ingenuity, in the rocky cliff which overhangs the river Esk. No tradition preserves the history or date of their execution, but concealment was evidently the chief design of the excavators. The original entrance is most ingeniously made in the shaft of a very deep draw-well, sunk in the court-yard of the castle, and from its manifest utility as the ordinary and indispensable appendage of the fortress, it most effectually conceals its adaptation as a means of ingress and communication with the rock chambers beneath. These are of various forms and sizes, and one in particular is pierced with a series of square recesses, somewhat resembling the columbaria of a Roman tomb, but assigned by popular tradition as the library of its later owner, Drummond the Scottish poet. Whatever was the purpose for which these were thus laboriously cut, the example is not singular. A large cave in Roxburghshire, hewn out in the lofty cliff which overhangs the Teviot, has in its sides similar recesses, and from their supposed resemblance to the interior of a pigeon-house, the cavern has received the name of the *Doo-cave*. Authentic notices of the Hawthornden caves occur so early as the reign of David II., when a daring band of Scottish adventurers made good their head-quarters there, while Edward held the newly fortified castle of Edinburgh, and the whole surrounding district. In the glen of the little river Ale, which falls into the Teviot at Ancrum, extensive groups of caves occur, all indicating, more or less, artificial adaptation, as human dwellings; and in many other districts similar evidences may be seen of temporary or permanent habitation, at some remote period, in these rude recesses. Along the coast of Arran there are several caves of various dimensions, one of which, at Drumandruin, or Drumidoon, is noted in the older traditions of the island as the lodging of Fin M'Coul,

the Fingal of Ossian, during his residence in Arran. Though low in the roof, it is sufficiently capacious for a hundred men to sit or lie in it. In this, as in the previous example, we find evidences of artificial operations, proving its connexion with races long posterior to those with whose works we have chiefly to do in this section of archæological inquiry. In the further end a large detached column of rock has a two-handed sword engraved on it, surmounted by a deer, and on the southern side of the cave a lunar figure is cut, similar in character to those frequently found on the sculptured pillars and crosses which abound in Scotland. It is now more frequently styled the king's cave, and described as the retreat of Robert the Bruce, while he lurked as a fugitive in the Western Isles; but like many other traditions of the Bruce this seems to be of very recent origin. Other caves in the same island are also of large dimensions, and variously associated with popular traditions, as, indeed, is generally the case wherever subterranean retreats of any considerable extent occur. Some are the supposed dwellings of old mythic chiefs, whose names still live in the traditional songs of the Gael. Others are the retreats which the primitive confessors of Scotland excavated or enlarged for their oratories or cells. Of the latter class are the caves of St. Molio, on the little island of Lamlash, or the Holy Isle, on the east coast of Arran; of St. Columba and St. Cormac, on the Argyleshire coast; of St. Ninian, in Wigtonshire; of St. Serf, at Dysart, on the Fifeshire coast; and the celebrated "ocean cave" of St. Rule, in St. Andrew's Bay. This last oratory consists of two chambers hewn out of the sandstone cliffs of that exposed coast. The inner apartment is a plain cell, entered from the supposed oratory of the Greek saint. The latter is nearly circular, measuring about ten feet in diameter, and has a stone altar left hewn in the solid rock on its eastern side. Possibly the singular dwarfie stone of Hoy, in Orkney, owes its origin to a similar source. A huge mass of square sandstone rock, which appears to have tumbled from a neighbouring cliff, has been hollowed out into three apartments, with a fire-place, vent, stone-bed, pillow, &c. The traditions of the island preserve strange tales of a giant and his wife who dwelt in this abode, and the "Descriptio Insularum Orchadium," written by Jo. Ben., (John the Benedictine,) in 1592, adds to the account of its internal accommodation the following somewhat whimsical provision for the comfort of the latter,—"Tempore camerationis fœmina gravida fuit, ut lectus testatur; nam ea pars lecti

in qua uxor cubuit effigiem habet ventri gravidi." Others of the Scottish caves and oratories are less artificial in their character. They are especially abundant in the Western Isles, and on the neighbouring coast, where the waves of the Atlantic have wrought out caverns far surpassing in extent and magnificence the largest in the interior of the country. Few of these, however, possess such marked features as to distinguish them from similar relics pertaining to no definite period, which are to be met with on every rocky coast exposed to the rude buffets of the ocean waves. One exception, indeed, may well claim to be singled out as unmatched by any other work of nature or art, though belonging to an older system than the primeval period of the archæologist. Amid scenery unsurpassed in the interest of its historic associations, or its venerable relics of medieval skill, stands the wondrous natural cave which popular tradition has associated with the favourite name of Fingal.

> "Nor doth its entrance front in vain
> To old Iona's holy fane,
> That nature's voice might seem to say—
> Well hast thou done, frail child of clay!
> Thy humble powers that stately shrine
> Tasked high and hard—but witness mine!"[1]

To those who are curious in investigating such ancient relics, Chalmers furnishes a very ample list of "Natural Caves in every part of North Britain, which have been improved into hiding-places by artificial means."[2] The associations with many of these retreats are of the most varied and romantic character; and few districts of the country are without some wild or thrilling legend or historic tradition relating to such caverned shelters of the patriot, the recluse, or the persecuted devotee.

[1] Lord of the Isles, Canto iv.

[2] Caledonia, vol. i. p. 97.

CHAPTER V.

TEMPLES AND MEMORIAL STONES.

THE ideal associations with the future and the past, which seem to find some outward manifestation even in the rudest state of society, spring from "that longing after immortality" which affords so strong an evidence of its truth. To this principle of the human mind is clearly traceable the origin of the commemorative erections which abound wherever man has fixed his resting-place. The most primitive of these ancient memorials are the rude unhewn columns or *standing stones*, as they are called, which abound in nearly every district of Scotland. Occasionally they are found in groups of two or three, and even in greater numbers, as the celebrated "standing stones of Lundin," near the Bay of Largo, Fifeshire, the largest of which measures sixteen feet in height above ground. Three only now exist, singularly rude and irregular in form, but the stump of a fourth remained when the account of Largo parish was written in 1792.[1] It has since been destroyed by treasure-seekers, tempted probably by the good fortune of others; for in the vicinity have been discovered, during the present century, some of the most interesting and valuable antiquities ever found in Scotland.

Of single memorial stones examples might be cited in nearly every Scottish parish; nor are they wanting even in the Lothians, and in the immediate vicinity of Edinburgh, where the presence of a busy population, and the unsparing operations of the agriculturist, have done so much to obliterate the traces of older generations. But nearly all are of the same character, differing in nothing but relative size,

[1] Sinclair's Statist. Acc. vol. iv. p. 546.

and the varying outlines of their unhewn masses. They have outlived the traditions of their rearers, and no inscription preserves to us the long-forgotten name. We are not left, however, to look upon them as altogether dumb and meaningless memorials. The history of a people contemporaneous, it may be, with their builders, reminds us how even the unsculptured obelisk may keep alive the records committed to its trust, and prove faithful to those for whom it was designed. "It came to pass," says Joshua, "when all the people were clean passed over Jordan, that the Lord spake, saying, Take you hence out of the midst of Jordan, out of the place where the priests' feet stood firm, twelve stones, that when your children ask, in time to come, saying, What mean these stones? then ye shall answer them." Some of these rude memorials still remaining in the districts immediately surrounding the Scottish capital, suffice to show the enduring tenacity of popular tradition. The *Hare Stane* on the Borough Moor of Edinburgh, celebrated in the lay of Marmion as the support of Scotland's royal banner,

> "The massive stone,
> Which still in memory is shown,"

affords one example of this. Mr. William Hamper, an ingenious English antiquary, has elaborately elucidated the derivation of the name as applied in England, and the use of the HOAR STONES,[1] the *menhars*, or bound stones, as stones of memorial, like "the stone of Bohan, the son of Reuben," and other ancient landmarks of Bible story.[2] Probably we shall justly esteem the "Hare Stane" as the memorial of the western boundary of the ancient chase, claimed from time immemorial by the neighbouring capital; but if so, its name has long survived all popular recollection of the meaning which it bore. The same term, *hair stanes*, is applied to a circular group of stones near Kirkdean, in the parish of Kirkurd, Peeblesshire. It would appear, however, to have been more frequently used in Scotland in the most sacred sense of a memorial, if we judge from the examples of its application as the designation of cairns, some of which, at least, and probably all, are sepulchral monuments. Among these are the Haer Cairns in the parish of Clunie; the Haer Cairns

[1] Archæologia, vol. xxv. p. 24. References to such landmarks are not uncommon in ancient charters. Notice of certain bound stones, at *Stansfield*, Staffordshire, occurs in a deed dated 6 Henry VII., ibid. vol. ii. p. 359, and similar allusions are common in the Scottish chartularies.

[2] Joshua xv. 6; xviii. 17; Deut. xix. 14; Prov. xxii. 28, &c.

of Blairgowrie and Kinloch, Perthshire; the Hier Cairns of Monikie, Forfarshire; the Herlaw, a gigantic cairn in the parish of East Kilbride, Lanarkshire; the more celebrated Harlaw of Aberdeenshire; the Harelaw at Lochhore, Fifeshire, and another in the same county, near Burntisland, where were found underneath the cairn a cist containing a skeleton with a bronze spear-head lying beside it.

Not far from the Hare Stone on the Borough Moor of Edinburgh, formerly stood another monolith termed the Camus Stone, but which, though it gave name to a neighbouring estate, and formed the march stone of its eastern bounds, was barbarously destroyed within memory of the present generation, to furnish materials for repairing the road! This name, whatever be its true derivation, is attached to numerous Scottish localities. Both in the example here referred to, in the Camus Stone of Kintore, Aberdeenshire, and in that near the village of Camustown, Forfarshire, vague tradition associated the stones with the name of a supposed Danish chief; but this is more probably the invention of modern topographers, than a genuine heirloom of popular tradition. The name of Combust figures among the list of Pictish kings as a contemporary of Marcus Antoninus Philosophus,[1] but the authority, though older, is not much more trustworthy; and we shall perhaps seek the meaning of the term more correctly in the correspondence of local peculiarities, as in Cambusbarron, Cambuslang, Cambusnethan, &c., where it is understood to indicate a promontory or bank inclosed by a crooked stream, from the Celtic, *cam*, crooked.[2] These Cambus-stones have all probably served as landmarks, or hoar stones; though answering also, it may be presumed, at times, like Laban and Jacob's Pillar, as the memorial of some high contract between friendly or rival chiefs.

Other stones, however, are associated with a variety of historical and legendary traditions, as the "Witch Stane" near Cairnbeddie, Perthshire, where, according to ancient local belief, Macbeth met by night with two celebrated witches to advise on the fate of his kingdom. It is fully as probable that this tradition may have existed in Shakspeare's time, as that it is derived from the marvellous conception of his great tragedy. When Cairnbeddie Mound was opened partially, about thirty years since, a quantity of very small iron horse

[1] Wyntoun's Cronyklis, book v. chap. vii. fol. 88.

[2] Gael. *cam*; Gr. *καμψος*; Lat. *curvus*; Gael. *camus*, a bay. The prefix *cam*, or crooked, enters into many Gaelic compounds and proper names.

shoes, with fragments of swords, and other weapons of the same metal, were found; so that it, doubtless, forms the tumulus on the site of some old and hard-fought battle-field, in which, perchance, the great usurper may have played his part. Another stone in the neighbouring parish of Meigle, a huge mass of unhewn trap, bears the name of "Macbeth's Stane," and various local traditions with which his name is associated, add to the probability of some true foundation for popular belief.

Evidence of the use of such rude columns as landmarks is frequently found of a comparatively recent date. The mention of standing stones, or circles, is not uncommon in charters and other deeds relative to the holding of courts and the boundaries of lands. More than one curious example of this occur in the Registrum Episcopatus Aberdonensis, as in the following, which also suffices to show the ancient application of the term standing stones:—"Thir are the boundis own my lord of Athollis syde, the stannande staine merkit like a horse-sho, and the dik passande fra the samme staine to the burg, and syne be zound the stripe beweste the smedy of Balmany." The *Saxum Falconis*, or "Hawk Stane," at St. Madoes, Perthshire, which stands on the marches of what is known to have been the ancient possessions of the Hays of Errol, and still bounds the parishes of St. Madoes and Inchture, is referred to by Boece as existing in his day, (1500,) and as having been set up immediately after the defeat of the Danes in the Battle of Luncarthy, fought *circa* A.D. 990. The victory is ascribed, according to a well-known tradition—still commemorated in the armorial bearings of the Hays—to the timely interference of a Scottish peasant and his two sons:—"Sone efter ane counsal was set at Scone, in the quhilk Hay and his sonnis war maid nobil, and dotad, for thair singular virtew provin in this feild, with sindry landis to sustene thair estait. It is said that he askit fra the King certane landis liand betwix Tay and Arole; and gat als mekil thairof as ane falcon flew of ane mannis hand, or scho lichtit. The falcon flew to ane toun four milis fra Dunde, called Rosse, and lichtit on ane stane, quhilk is yit callit The Falcon Stane; and sa he gat al the landis betwix Tay and Arole, six milis of lenth, and four of breid; quhilk landis ar yit inhabit be his posterite."[1]

The sacredness which naturally attached to landmarks, in early times, and of which we have remarkable evidence in the Old Testa-

[1] Bellenden's Boece, b. xi. chap. viii.

ment references to them, was doubtless no less strongly felt in relation to all stones of memorial, the enduring parchments of an unlettered age. They seem accordingly to have been sometimes regarded, like the medieval altar, as the inviolable witness of any agreement. The following curious evidence of this feeling occurs in a deed in the possession of W. H. Fotheringham, Esq., dated at Kirkwall in 1438:—"Till all and synd lele folk in Cryste, to quhais knawledge yir pnt. wris. sal cum, Henry Randall, lawman of Orknay, John Naraldson, balze off Kirkwaw, Jamis off Lask, Greeting in Gode . . . make kend that we the forsaide bystude saw and onherde, and for witnesse wes tane quhene y^t^ John off Erwyne and Will. Bernardson swor on the Hirdmane Stein before owre Lorde ye Erle off Orknay and the gentiless off the cuntre, that thay bystude saw and onherde, and for witnesse wes tane quhene that Thos Sincler, ye son off quhiln Davy Syncler, callit in ye vestre in Sant Mawing Kirk, John of Kirkness," &c. In this comparatively recent transaction we have probably a very accurate illustration of the ceremonial which accompanied the erection of a hoare-stone, or stone of memorial, whether as a landmark or the evidence of some solemn treaty. The document from which it is extracted has a further interest in connexion with early Scottish history. Its date is thirty years prior to the marriage of James III. of Scotland with Margaret of Denmark, when Orkney was first annexed to the Scottish Crown; yet it is written throughout in the Scottish tongue.

Of an entirely opposite character are the Cat Stanes found in various parts of Scotland, apparently deriving their name from the British *Cad* or the Celtic *Cath*, signifying a battle, and therefore marking the scene of some ancient conflict. In the immediate neighbourhood of the Camus Stone near Edinburgh, formerly stood two very large conical cairns, styled the Cat-stanes, until demolished by the same irreverent utilitarians who had found covetable materials in the rude memorial stone. Underneath the cairns were cists containing human skeletons and various bronze and iron weapons. Two iron spear-heads found in them are now preserved in the neighbouring mansion of Mortonhall; and according to the description of other relics formerly possessed by a neighbouring farmer, they would appear to have also contained celts and other weapons of bronze. A few yards to the north-west of the site which these cairns occupied, there still stands the Kel or Caiy Stone, a mass of the red sandstone of the

district, measuring above eleven feet in height. On digging in the neighbourhood of this primitive monument a quantity of human bones have been found, irregularly interred, without cists or urns, and not far from it are still visible the rude earth-works of a British camp. Much more extensive intrenchments of an oval form existed in the immediate neighbourhood, prior to the construction of the new road, and are described by General Roy in tracing one of the Roman iters.[1] There is another standing-stone within the Mortonhall grounds, at about half a mile distant from the site of the Cat-stanes, and also two larger masses lying together, which are not improbably the remains of a ruined cromlech. Here, in all likelihood, has been the battle ground of ancient Scottish chiefs, contending, it may be, with some fierce invader. The locality is peculiarly suited for the purpose. It is within a few miles of the sea, and though inclosed in an amphitheatre of hills, it is the highest ground in the immediate neighbourhood, and the very spot on which a retreating host might be expected to make a stand ere they finally betook themselves to the neighbouring fastnesses of the Pentland Hills. A few miles to the westward of this is the oft-noted CATT STANE, in Kirkliston parish, on which the painful antiquary may yet decipher the imperfect and rudely lettered inscription—the work most probably of much younger hands than those that reared the mass of dark whinstone on which it is cut—IN [H]OC TVMVLO IACET VETTA . . VICTR . . About sixty yards to the west of the Cat-stone a large tumulus formerly stood, which was opened in 1824, and found to contain several complete skeletons, but nearly all traces of it have now disappeared.

The Caly Stone.

The rearing of stones of memorial on the scenes of victory is a custom of many early nations, and one which has not even now entirely fallen into disuse. The Bauta-stein of Norway and Denmark corresponds in its signification with the Cat-stane of Scotland, nor are there wanting examples of Scottish monoliths surrounded like

[1] Roy's Military Antiquities, p. 103.

the Danish ones with a pile of small stones at their base. Such is the case with the CLACH STEIN at Bible in Lewis, and the remarkable CLACH AN DRUIDEAN, or Stone of the Druids, in the same island, which stands above sixteen feet high.

"The Gaelic people," says Chalmers,[1] "did sometimes erect memorial stones; which as they were always without inscription, might as well have not been set up." But independently of the fact that these monuments of the remote past have long since accomplished the original purpose of their erection, it is obvious that some of them can still furnish an intelligible response to those who ask, "What mean these stones?" Many of them, however, it is true, have waxed dumb in the lapse of ages, and hold a more mysterious silence than that which surrounded the long-guarded secrets of Egypt's memorial stones. Some of these are perhaps the last solitary column which marks the site where once the "Druid circle" and its mystic avenue covered the plain. Remote and widely severed stones may thus be parts of the same systematic design, as is rendered sufficiently probable when we remember that that of Avebury numbered even in the days of Stukeley six hundred and fifty stones, though then by no means perfect, and that that of Carnac in Brittany extends over an area of eight miles in length. So common are they still in Scotland that Chalmers dispenses with his usual laborious accumulation of references, and contents himself with this very comprehensive one: "See the Statistical Accounts *everywhere!*"

Other monoliths are probably the TANIST STONES,[2] where the new chief or king was elected, and sworn to protect and lead his people. One at least, the most famous of Scottish Tanist Stones, still exists, and mingles with the gorgeous rites of coronation services in Westminster Abbey the primitive elements of our most ancient popular elective monarchy. The celebrated *Lia Fail*, or Stone of Destiny, is that which, according to Scottish chroniclers, Gathelus, the Spanish King, a contemporary of Romulus, sent with his son when he invaded Ireland; and on equally trustworthy authority it is affirmed to have been the veritable pillow of the patriarch Jacob, which he set up as a memorial stone, on the scene of his wondrous vision!

> "A gret stane this Kyng than had,
> That fore this Kyngis sete wes made,

[1] Caledonia, vol. iii. p. 233.

[2] Gael. *Tanaiste*, a thane or lord, the next heir to an estate.

And haldyne wes a gret Jowale
Wytht-in the Kynryk of Spayne hale.
This Kyng bad this Symon ta
That stane, and in-tyl Yrland ga,
And wyn that land and occupy,
And halde that stane perpetually.
Fergus Erc son fra hym syne
Down discendand ewyn be lyne
In to the fyve and fyfty gre,
As ewyne recknand men may se,
Brought this Stane wytht-in Scotland,
Fyrst quhen he come and wane that land.
* * * * *
Now will I the werd rehers,
As I fynd of that Stane in wers;
Ni fallat fatum, Scoti, quocumque locatum
Invenient lapidem, regnare tenentur ibidem."[1]

The Lia Fail is believed to have served for many ages as the coronation throne of the monarchs of Ireland; and according to Irish bardic traditions, to have borne testimony to the divine right of sovereignty by roaring beneath the legitimate monarch when seated on it at his inauguration! It was removed to Scotland, and deposited at Icolmkil or Iona, for the coronation of Fergus Erc, or Mac Eark, a prince of the blood royal of Ireland;[2] from which it was finally translated to the Abbey of Scone, when the Scottic kings had extended their sovereignty over the ancient kingdom of the Picts. In Scotland it bore the name of the "King's Stone," and was regarded as the national palladium, until Edward I. in 1296, ordered it to be conveyed to Westminster as an evidence of his absolute conquest of Scotland.[3] But the evidence failed, and the older prophecy holds good that wherever that stone rests princes of Scottish blood shall rule the land, though the Lia Fail no longer gives audible testimony to the legitimate heir. It can hardly fail to impress the thoughtful mind, as a singular link between eras so widely severed, not by time only but by every social and political change, that the rude Tanist Stone belonging to a period dimly cognizable in the remotest past, still forms a part of the coronation chair of the British sovereign in Westminster Abbey. The use of the Tanist Stone is, like so many other primitive customs, of Eastern origin, and traceable to a very remote era. Thus when Abimelech was made king, it was *by the pillar*

[1] Wyntownis Cronykil, book iii. chap. ix.

[2] Transac. Royal Irish Academy, vol. xviii. p. 159. Dr. Petrie challenges the pedigree of the Scottish Lia Fail, and even goes some length to establish the reputation of a stone at Tara as the genuine one, but the Scottish stone has too faithfully fulfilled its character as the Stone of Destiny to admit of any such unaccredited rival!

[3] *Vide* Hailes' Annals, *note*, vol. ii. p. 242.

which was in Shechem;[1] and when Jehoash was anointed king by Jehoiada, *the king stood by a pillar, as the manner was.*[2] The standing stone appears indeed to have been the most sacred attestation of every solemn covenant between contracting parties, including that between the elected chief or king and his people; and hence the superaddition of those peculiar virtues supposed to attach to the ancient Scottic Lia Fail.

One other stone is deserving of some note, from the vague records which tradition has preserved of its connexion with the rites of a long extinct creed. Mr. Wakeman remarks, in his Archæologia Hibernica,[3] "Perforated stones, very similar to the ordinary pillar stone, are found in many parts of Ireland, Scotland, and even, as appears from Mr. Wilford's Asiatic Researches, in India. Abroad as well as at home their origin is shrouded in the deepest obscurity, nor is it likely that the subject can ever be elucidated." They are by no means so common, however, as this would imply. At Applecross, in the west of Ross-shire, a perforated stone occupies the centre of a stone circle; and at Tormore, in the parish of Kilmorie, Buteshire, there is a celebrated monolithic circle, styled *Siudhe choir Fhionn*, or Fingal's cauldron seat, one of the columns of which is perforated, and is commemorated in old Highland traditions as the stone to which the Celtic hero was wont to tie his dog Bran. Immediately adjoining the circle are three huge unhewn columns, about fifteen feet in height above the surface of the moor. Along with these examples may be noted a curious group in the parish of Maddern, Cornwall, consisting of three stones, the centre one of which is pierced with a large circular hole, through which, Borlase informs us,[4] rheumatic patients were wont to crawl as a sovereign remedy for their disease. Perforated stones must once have been common in England, and probably in Scotland also, as the Anglo-Saxon laws repeatedly denounce similar superstitious practices; but they are now of the rarest occurrence. Tradition has preserved some curious associations with one of the most interesting Scottish examples, which may perhaps be thought to throw some doubtful light on the use to which such perforated pillars were devoted at a comparatively late period of our island history. The celebrated STONE OF ODIN, near the Loch of Stennis, in Orkney, which has had a new interest added to it by being inter-

[1] Judges ix. 6.
[2] 2 Kings xi. 14.
[3] Archæol. Hibern. p. 19.
[4] Borlase, p. 177, Plate xiv.

woven with the romantic incidents of the "Pirate," was one of the remarkable monolithic group called The Stones of Stennis. It formed no part, however, either of the Great Ring of Brogar, or of the neighbouring circle of Stennis, but stood apart, to the north-east of the latter group; though it can scarcely be doubted that it bore some important relation to these ancient and mysterious structures. The Stone of Odin is described as standing about eight feet high, and perforated with an oval hole large enough to admit a man's head. A curious, though rudely executed bird's-eye view of the Stones of Stennis is given in the Archæologia Scotica,[1] from a drawing executed by the Rev. Dr. Henry, about the year 1780, and there a man and woman are seen interchanging vows, plighted by the promise of Odin, which Sir Walter Scott refers to as "the most sacred of northern rites yet practised among us." The vow was sworn while the engaging parties joined hands through the perforation in the stone; and though it is difficult to decide how much of the tradition may be ascribable to modern embellishment and the adaptation of a genuine heirloom of primitive superstition to the pre-conceived theories of local antiquaries, there cannot be a doubt of the popular sacredness attached to this sacramental stone in former times. An illustration of the practice from which this originated is supposed to be traceable in an ancient Norse custom, described in the Eyrbiggia Saga, by which, when an oath was imposed, he by whom it was pledged passed his hand, while pronouncing it, through a massive silver ring sacred to this ceremony.[2]

The solemnity attached to a vow ratified by so awful a pledge as this appeal to the Father of the Slain, the severe and terrible Odin, continued to maintain its influence on the mind till a comparatively recent date. Dr. Henry, writing in 1784, refers to the custom as having fallen into disuse within twenty or thirty years of the time he wrote, and adds, "this ceremony was held so very sacred in those times, that the person who dared to break the engagement was counted infamous, and excluded all society." Principal Gordon, of the Scots College, Paris, who visited Orkney in 1781, thus refers to a curious example, showing probably the latest traces of this venerable traditionary relic of Scandinavian superstition:[3]

[1] Archæol. Scot. vol. iii. p. 122.

[2] Eyrbiggia Saga. Abstract Illust. of Northern Antiquities, p. 479.

[3] Sir Walter Scott speaks of this ceremony as confined to the lower classes, at the time of his writing the "Pirate;" but this is contradicted by the statement of Dr. Henry, and there is every reason to believe that it had fallen at a much earlier period into disuse.

"At some distance from the semi-circle stands a stone by itself, eight feet high, three broad, nine inches thick, with a round hole on the side next the lake. The original design of this hole was unknown, till about twenty years ago it was discovered by the following circumstance: A young man had seduced a girl under promise of marriage, and she proving with child, was deserted by him. The young man was called before the Session; the elders were particularly severe. Being asked by the minister the cause of so much rigour, they answered, You do not know what a bad man this is; he has broke the promise of Odin. Being further asked what they meant by the promise of Odin, they put him in mind of the stone at Stenhouse, with the round hole in it, and added, that it was customary when promises were made, for the contracting parties to join hands through this hole; and promises so made were called the promises of Odin."[1]

It is possible that the awe which the vow of Odin so recently inspired may have originated in the use of the stone for more dreadful purposes than the most solemn contract, sealed with imprecations derived from a barbarous Pagan creed; though little value can be attached to another tradition, described by Dr. Henry as still existing in his time,—that human victims destined for sacrifice were bound to the perforated column, preparatory to their slaughter as an acceptable offering to the terrible god. Another stone, on the north side of the island of Shapinshay, bears the name of the Black Stone of Odin; but no definite associations are now attached to it, and its sole value is as the march stone between the grounds of two conterminous heritors.[2] A more trustworthy tradition ascribed peculiar virtues to the Stennis Stone, manifestly corresponding with those referred to by Borlase in connexion with one at Maddern, and denounced in ancient Anglo-Saxon laws. According to this a child passed through the hole would never shake with palsy in old age. The practice exhibits a sagacious anticipation of future ills, the hole being too small to admit of the remedy being made available when most required.

A view of this remarkable memorial of ancient manners and superstitious rites, is given in Lady Stafford's "Views in Orkney, and on the North-eastern Coast of Scotland," drawn in 1805, and has been copied as one of the illustrations for the Abbotsford edition of the Pirate. But the stone itself no longer exists. After having survived the waste of centuries, until it had nearly outlived the last traditionary remembrance of the strange rites with which it had once been associated, it was barbarously destroyed by a neighbouring

[1] Archæol. Scot. vol. i. p. 263.

[2] Sinclair's Statist. Acc. vol. xvii. p. 235.

29934

farmer, in the year 1814, along with two stones of the adjacent semicircle. Had it not been for the interference of Mr. Malcolm Laing, the historian, the whole group of Stennis would have been broken down as building materials for the ignorant Goth's cow-sheds. The act was the less culpable, perhaps, as the perpetrator was a stranger who had only recently taken up his abode in Orkney. It affords proof, however, that the native reverence for the venerable memorial had not entirely disappeared, that its unfortunate destroyer's life was rendered miserable by the petty persecutions with which the natives sought to revenge the destruction of their sacramental stone. So far, indeed, was this manifestation of popular indignation carried, that various conspiracies are said to have been formed to injure him, and two different attempts were made to set fire to his dwelling and property;[1] a sufficiently manifest token that the old spirit of veneration for the stone of Odin was not unknown to the modern Orcadian.

A still more remarkable class of monumental stones remain to be described, including the singular sculptured pillars, peculiar, it is believed, to Scotland. But we have already trespassed on the relics of later eras, and these necessarily belong to a period long posterior to that when the rude aboriginal Caledonian possessed no other tools than the stone hammer and the flint chisel or arrow-head, with which to grave the memorial of his fame and the annals of his race.

In the investigations of the archæologist, even though devoted, as this inquiry is, to the examination of ancient memorials within an extremely circumscribed area, he frequently finds that he is dealing with the evidences of certain phases of progressive civilisation in the history of the race, rather than with mere national peculiarities. The farther research is pursued this becomes the more apparent, and we learn, without much surprise, from the recent invaluable researches in the valley of the Mississippi,[2] that the ancient tumuli of the American continent are found to contain, amid many relics peculiar to the new world, stone celts and hammers, flint and bone arrow and lance heads, and other primitive weapons and implements so precisely resembling those disinterred from the early British barrows, that the most experienced eye could hardly tell the one from the other. To conclude from this that we have found evidence of an affinity of race, or of

[1] Peterkin's Notes on Orkney, p. 21.

[2] Ancient Monuments of the Mississippi Valley, Smithsonian Contributions to Knowledge, vol. i.

mutual intercourse between the rude aborigines of Britain and America, in that mysterious period of the long forgotten past, however plausible it might seem at first sight, would be to adopt a theory which the investigation of the arts of modern races, such as the natives of Polynesia, must at once dispel. The same correspondence of primitive weapons is found in the north of Europe, in the steppes of Asia, in the ancient tumuli near the Black Sea, and even mingling with the evidences of earliest civilisation on the banks of the Tigris and the Nile. We must look, therefore, for the means of accounting for such remarkable correspondence of primitive tools, to some cause operating naturally at a certain stage of development in the human mind. It is the first manifestation of man's intelligent instincts as a tool-using animal, and furnishes a singular evidence of the instinctive faculties which belong to him as well as to the lower animals, though few and uncertain traces of these remain distinguishable where civilisation has fostered the nobler faculty of reason, and brought it into healthy and vigorous play.

It is not unworthy of note, in the exhibition of a more advanced stage of the same development of features pertaining to the human mind in its progressive civilisation, that there seems also to have been an epoch in the early history of man, when what may be styled the monolithic era of art has been developed under the utmost variety of circumstances. In Egypt it was carried out, with peculiar refinement, by a people whose knowledge of sculpture and the decorative arts proves that it had its origin in a far deeper source than the mere barbarous love of vast and imposing masses. In Assyria, India, Persia, and throughout the Asiatic continent, this monolithic taste appears to have manifested itself among many independent and widely severed races. In Mexico and the central portions of the American continent, a people parted apparently by impassable oceans from the old world, have left enduring evidences of this psychological phenomenon; and in the north of Europe, under circumstances no less widely different from all these nations, numerous monolithic columns and groups attest the same pervading idea. In our own island, more especially, where now we are content to build a monumental obelisk, just as we do a cotton-mill chimney, with successive tiers of stone, we possess some of the most remarkable remains of this peculiar class. The destructive encroachments of civilisation, and the ruthless assaults of the quarrier and the builder, have done much to obliterate these sin-

gularly interesting memorials of primitive antiquity. Already the vast temple of Avebury has all but disappeared, like an old ripple-mark of the tide of time. But there still remain, in the huge cromlechs, circles, and standing stones scattered throughout the land, abundant evidence of the influence of the same peculiar taste on the early races of the British Isles, originating, as I conceive, in an unconscious aim at the expression of abstract power.

The convenient terms of Druid altars and temples have long supplied a ready resource for the absence of all knowledge of their origin or use. The cromlech has at length been restored to its true character as a sepulchral monument by the very simple process of substituting investigation for theory. But after the devotion of many learned and ponderous volumes to the attempted elucidation of Druidism, the subject has lost little of its original obscurity; and we shall follow a safer, if it be a less definite guide, in tracing the peculiar character of the so-called Druidical monuments to feelings which appear to have exercised so general an influence on the human race. The idea of the origin of these monolithic structures from some common source seems to have suggested itself to many minds. Colonel Howard Vyse, when describing the great hypæthral court, surrounded with colossal figures, which stands before the rock temple of Gerf Hossein, the ancient Tutzis, remarks:—"The massive architraves placed upon the top of these figures reminded me, like those at Sabooa, of Stonehenge; and it is not improbable that, together with religious traditions, the art of building temples may have even reached that place from Egypt."[1]

To speak, as some recent writers have done, as if the mechanical and engineering knowledge by which the Egyptians were able to quarry and erect their gigantic monoliths had become even a greater mystery to us than the hieroglyphic legends which they inscribed on them, is manifestly a hasty and altogether unfounded assumption. It is their taste, and not their skill, which is wanting. The modern eye is satisfied with the perfect proportions of the monumental column, without seeking the barbaric evidence of difficulties overcome implied in the lifting of it in one mass upon its pedestal. A few years since the workmen in Craigleith quarry, near Edinburgh, disengaged a mass of the fine sandstone of the district, capable of rivalling the colossal obelisks of Egypt; but the proprietor in vain advertised the feat, in

[1] Pyramids of Gizeh, vol. i. p. 54.

the hope that some committee of taste would avail itself of the opportunity of once more erecting a British monolith of primitive mass; and he had at last to break it down into cubes adapted to the ordinary wants of the modern builder. When, however, such a feat has to be accomplished as the spanning of the Menai Straits with a railway viaduct, no lack of engineering skill is felt in coping with difficulties which may stand comparison with the most gigantic of the self-imposed feats of the old Egyptian builder.[1] We may fairly presume, therefore, that we have left the monolithic era behind us, not by the oblivion of former knowledge, but by the progress of the human mind beyond that stage of development when it finds its highest gratification in such displays of rude magnificence and vast physical power.

The Stones of Stennis, already referred to as the Orcadian Stonehenge, are unquestionably the most remarkable monolithic group in Scotland, and, indeed, if we except the great temple of Salisbury Plain, in the British Isles. Without entering meanwhile into any investigation of the evidence which various writers have derived from northern mythology or popular traditions, with a view to throw some light on the probable date of their origin, or the character of their builders, it furnishes a rational basis for the classification of such ancient monuments among the remains of the Primeval Period, that they exhibit no indication of having been hewn or shapen with tools. Unless the perforation of the stone of Odin be an exception, the columns have been erected just as they were dislodged from the earth; and we have only to account for their separation from the parent strata and their erection on the site which they still occupy. In this respect they correspond with the more ancient English temple of Avebury rather than with that of Stonehenge, which belongs to an era when efficient metallic tools, whether of bronze or iron, must have supplied the means of hewing the gigantic columns into some degree of uniformity, and fitting the lintels to the upright columns by means of the mortice and tennon still discoverable amid the ruins of that wonderful monument of ancient skill. We are not altogether without some evidence to induce the belief that the early Caledonian did dislodge and cleave into amorphous columns the unquarried rocks with

[1] The Menai tubes, composed of wrought-iron plates, measure each 1524 feet in length, and the weight of the whole is estimated at 10,540 tons. This enormous structure had to be raised a height of 100 feet, and thrown over an arm of the sea 1100 feet in width, and navigable by the largest ships.

which his native soil abounded, when armed with no fitter tool than the stone wedge and hammer. The Rev. James Little, in furnishing Sir John Sinclair with an account of the antiquities of the parish of Southwick, in Kirkcudbright, mentions the discovery, on the estate of Southwick, "in the middle of a large granite stone, when blasted with gunpowder, in a socket exactly fitted to it, of a piece of the same kind of substance, smooth and polished, in form somewhat resembling a rude hatchet, about nine inches long. The virtuosi to whose inspection it was submitted did not hesitate immediately to pronounce it to be a hatchet which had been used by the Druids in performing sacrifices; which conjecture they imagined warranted by the vestiges of a Druidical temple very near where it was found."[1] The reverend Statist rather inclines to regard it as a *lusus naturæ*. A few years later another was found, under similar circumstances, in a cavity of an enormous mass of stone, on the farm of Mains, near Dumfries. It was also of polished granite; and from the outline of it in the Archæologia, no doubt can be entertained of its being a genuine stone wedge or celt.[2] Still it is not meant to assume from this that all such monuments were erected prior to the introduction of metals, but only that they indicate an origin coeval with the state of civilisation in which the use of metallic implements was, at best, but imperfectly known, and when the massive size of these rude unhewn monoliths abundantly satisfied the human mind in its desire for a visible shrine adequate to the awful mysteries shadowed forth in the heathen mythology.

The site of the celebrated Orkney group is perhaps little less remarkable than the venerable monuments to which it owes its name. A long and narrow neck of land separates the Loch of Stennis, a salt-water lake into which the tide rises and falls, from the fresh waters of the Loch of Harray, save at the narrow strait of Brogar, where at times the tidal wave mingles with the tideless waters of Harray; and on this, the great circle or Ring of Brogar, as it is most commonly styled, is reared. Judging from the regularity with which such of the stones as still remain are disposed, the number of columns originally forming the circle appears to have been sixty, on the assumption that they were placed at nearly equal distances apart. Of these sixteen remained *in situ* in 1792, and eight lay prostrate near their original sites; but now only twenty-three stones remain, ten of which are

[1] Sinclair's Stat. Acc. vol. xvii. p. 110. [2] Archæologia, vol. vii. p. 414.

prostrate, and the broken stumps of a few more serve to indicate the places they once occupied. The whole is inclosed by a deep trench, except at two opposite points, where a level break occurs, affording the means of entrance and exit. The diameter of the great circle, from the inner edge of the trench, measures 366 feet. From the eastern entrance it is possible that an avenue of stones may have once led to the Bridge of Brogar, as the stepping-stones are styled by which the shallow channel between the Lochs of Harray and Stennis is crossed. On the eastern side of the channel one column still remains, bearing the name of the Watch Stone; derived apparently from its position on the brink of the ford commanding the passage between the great circle and the opposite shore, but which may possibly be the only relic of the avenue once connecting the circles on each side of the loch. The smaller group is now frequently designated, from its crescent form, the temple of the moon, and the larger circle that of the sun; but there can be no doubt that these are quite modern and spurious designations. Stennis Circle, as the smaller group is properly termed, is situated on a nearly level piece of ground, and its semicircular outline is further indicated by an inclosing mound of earth, presenting its opening to the south; whereas the larger circle is environed only by a fosse. This group was composed, at no very remote period, of seven or eight stones, but no doubt can be entertained that the figure was originally a circle, inclosing with its vallum, a large cromlech, the ruins of which still remain within the area. It is described by Wallace in 1700 as "a round set about with high smooth stones or flags;"[1] so that it would appear to have been complete at that comparatively recent period. It stood upon a raised circular platform, part of which still remains about three feet above the surrounding level. Beyond this is the embankment, forming a circle, the radius of which, measured from its outer edge, is 117 feet. The radius of the circle, on the circumference of which the stone columns were placed, is about fifty-two feet; and judging from the space between those still standing, twelve stones may be supposed to have completed the circle. But though so small a group when compared with the Ring of Brogar, its columns are fully double the average height of the great circle, and it must have presented, when perfect, a far more magnificent and imposing aspect. It is painful to think that within our own time these most interesting memorials of an era

[1] Wallace's Orkney, p. 53.

far beyond the date of written records have fallen a prey to ignorance, in that dangerous transition state when the trammels of superstition are broken through without being replaced by more elevated principles of veneration. An intelligent native of Orkney, who appears to have left his home about 1789, remarks in his MS. notes accompanying a valuable donation of books relating to the northern islands presented to the Society of Antiquaries of Scotland:—"If Mr. Daniell's sketch of the Stones of Stennis (taken in 1818) be at all accurate, many of them have disappeared, and others fallen to the ground, since I can remember."[1] It was in the immediate neighbourhood of the smaller circle of Stennis that the Stone of Odin stood, completing, along with the adjacent earth-works alluded to in a former chapter, a group of primitive monuments, which, though inferior in magnitude to the vast temples of Wiltshire, or of Carnac in Brittany, are scarcely surpassed in interest even by these remarkable monuments.

I am indebted to Lieutenant Thomas, R.N., to whose liberal communications of the result of his observations in Orkney I have already referred, for careful observations and measurements made by him on the Stones of Stennis, of which the following are the most important results:—

The Great Circle of Stennis, or Ring of Brogar, is a deeply entrenched circular space, containing almost two acres and a half of superficies, of which the diameter is 366 feet. Around the circumference of the area, but about thirteen feet within the trench, are the erect stones, standing at an average distance of eighteen feet apart. They are totally unhewn, and vary considerably in form and size. The highest stone was found to be 13.9 feet above the surface, and, judging from some others which have fallen, it is sunk about eighteen inches in the ground. The smallest stone is less than six feet, but the average height is from eight to ten. The breadth varies from 2.6 to 7.9 feet, but the average may be stated at about five feet, and the thickness about one foot—all of the old red sandstone formation.

The trench around the area is in good preservation. The edge of the bank is still sharply defined, as well as the two foot-banks, or entrances, which are placed exactly opposite to each other. They have

[1] A. Z., a native of Orkney, resident in London, who under this title presented to the Society from time to time a curious and valuable collection of books relating to the Orkney and Shetland Islands, accompanied with copious MS. notes, some of which contain touching allusions to the fond recollections cherished by him of his native place.

no relation to the true or magnetic meridian, but are parallel to the general direction of the neck of land on which the circle is placed. The trench is twenty-nine feet in breadth, and about six in depth, and the entrances are formed by narrow earth-banks across the fosse.

The surface of the inclosed area has an average inclination to the eastward. It is highest on the north-west quarter; and the extreme difference of level is estimated to be from six to seven feet. The trench has the same inclination, and therefore could never be designed to hold water.

DIMENSIONS OF THE RING OF BROGAR.

Radius to outer edge of fosse,	212.2 feet.
Radius to inner edge of fosse,	183.2 „
Radius of circle on which the stones are placed,	170.0 „
Distance of pillars from edge of fosse,	13.2 „
Breadth of fosse,	29.0 „
Depth of fosse, average,	6.0 „
Distance of columns apart, average equal to breadth of causeways,	17.8 „
Highest column,	13.9 „
Lowest column,	5.9 „
Average height of columns,	9.0 „
Broadest column, stump only remaining,	7.3 „
Narrowest column,	1.6 „
Average breadth,	5.0 „
Average thickness,	1.0 „

The neighbourhood of Stennis seems to have been consecrated ground to the ancient Orcadians. Within no great distance there are two circles of standing stones, two others all the remaining stones of which are prostrate, and four single standing stones, besides about twenty tumuli of various forms and sizes.

It was long the fashion with antiquaries to receive as an established and altogether incontrovertible position the Druidical origin of all symmetrical groups of standing stones in the British Isles. The more careful researches of later writers into the early history of the Orkney and Shetland Isles, and of their intimate connexion with Scandinavia prior to the Christian era, have led to a revision of this opinion, and to an almost universal abandonment of a Druidical for a Scandinavian origin of the great Temple of Stennis, and the numerous other corresponding structures in the north of Scotland and the Western Isles. Barry, Hibbert, Scott, and Macculloch have each assailed the old Druidical fancies with considerable learning and ability. "Dr. Macculloch," says Dr. Hibbert, "has wielded the hammer of Thor with very signal success in aid of the demolition of the Druidic theory." But notwithstanding so powerful an array of

authorities in support of this newer line of argument, I venture to think, that when the exclusive Scandinavian theory shall have been demolished with equally signal success, we shall be nearer the truth than has been yet attained. The common Gælic phrase—*Am bheil thu dol do'n chlachan*,—Are you going to the stones? by which the Scottish Highlander still inquires at a neighbour if he is bound for church, seems in itself no doubtful tradition of ancient worship within the monolithic ring. Yet it has already been shewn that some of these were not temples but sepulchral monuments; nor is their uniformity sufficiently marked to prove a common origin for all. Sir Walter Scott remarks, in his Abstract of the Eyrbiggia Saga:[1]—"The Temple of Thor is described as a circular range of upright stones, within which one more eminent marked the Stone of Thor, where human victims were immolated to the Thunderer, by breaking or crushing the spine. And this description may confute those antiquaries who are disposed to refer such circles exclusively to the Celtic tribes, and their priests, the Druids." Dr. Hibbert has quoted this paragraph as a refutation of those who would contend that the Temples of Orkney had been used by Celtic tribes, before they were occupied and dedicated anew by later Scandinavian worshippers. But it unfortunately happens in this, as in too many other instances, that the "Abstract" furnishes a very partial rendering of the original saga; where the Temple of Thor is described as a vast inclosed edifice, with chambers constructed of wood, and a chancel or sacrarium specially dedicated to the Deity, of which the stone circle formed only one of its complicated features.[2] Doubtless in some at least of the monolithic groups still standing, we see but the skeleton of structures

[1] Illustrations of Northern Antiquities, p. 480.

[2] The following is the passage to which Sir Walter Scott refers:—"Visitur ibi hodiedum circulus concessus judicialis intra quem homines, Diis victima fieri jubebantur. Eminensque in isto circulo Saxum Thoris, in quo hominibus sacrificio destinatis terga confracta sunt, quodque sanguinem adhuc colorem conspiciendum præbet," &c. (Eyrbiggia Saga. G. J. Thorkelin, 1787. P. 27.) But a much more minute account is given in an earlier portion of the Saga, where Thorolf ascertains the destined site of the new temple by casting its wooden pillars into the sea, and accepting as the sacred spot a promontory to which they were borne by the tides. This is the description of the erection, which it will be seen is something different from a mere circle of stones:—"At Hofsvog he caused a temple to be erected, a house of vast magnitude, with doors in the side wall, somewhat near to either extremity. Within the doors were the pillars of the chief seat, secured with nails, and called sacred or divine. In the interior another chamber was constructed in the shape which the chancels of churches now have, in the middle of the pavement of which stood the pulvinar, as well as the altar," &c. *Vide* Ibid. p. 11.

which have outlived many no less indispensable features of the original plan, formed of more perishable materials. Modern agricultural operations have occasionally brought to light very obvious evidences of this. An intelligent observer who resided on the spot, and closely watched the operations of the workmen employed in trenching and levelling the site of a "Druidical Circle" on Donside, in the parish of Tullynessle, Aberdeenshire, has furnished the following account of their disclosures:—"The upright stones were mostly gone; but it was evident that they had inclosed a circle of about fifty feet diameter. The ground on which the temple stood was sloping, and within the circle it had been levelled by removing the earth on the upper side, so as to present a bank, nearly perpendicular, of not less than five feet, gradually decreasing to the east or lower part, when it became level. The upright stones were on the top of the bank. From the circle, in a south-east direction, a paved road could be traced to the distance of at least six hundred yards through a bog, which at the farther end was about six yards wide, but nearly twenty yards wide when it approached within fifty yards of the circle, and here the paving was covered with ashes. The stones were not squared, but very neatly fitted into each other."[1] In the course of these operations two curious stone vessels were found, hereafter described, one of which is now in the Museum of the Scottish Antiquaries. But the differences are so striking among many of the Scottish monolithic groups, that we look in vain for evidences of uniformity of faith or object in their builders. Some are single circles, others several concentric circles. There are ovals, ellipses, and semicircles, and even cruciform groups, which a hasty generalizer might accept as an evidence of primitive Christian art. But one thing is common to the whole, and is found to characterize similar structures throughout Europe and Asia—and that is the huge unhewn monolithic columns, the evidence not of one creed, but of one remarkable phase of the human mind, the influence of which has long since disappeared. Diverse as were the Celtic and Scandinavian creeds, their temples were probably of similar character; and the rude Norsemen who possessed themselves of the Orkney Islands in the ninth century, found far less difficulty in adapting the Temple of Stennis to the shrine of Thor, than the Protestants of the sixteenth century had to contend with when they appropriated the old Cathedral of St. Magnus to the

[1] MS. Letter, John Stuart, Esq., Advocate, Aberdeen, 1838. Libr. Soc. Antiq. Scot.

rites of Presbyterian worship. It is unquestionably opposed to all probability that the Great Circle of Stennis, with its grand but rude monoliths, was the work of the Norse rovers of the ninth century, seeing we have good reason to believe that the Christian missionaries of Iona, or the disciples of St. Servanus, had long before waged successful war with the Pagan creed of the native Orcadians. But the question of Scandinavian origin is fortunately put to rest, at least in the case of this the most remarkable of all the Scottish temple groups. Professor Munch of Christiania, who visited this country in 1849, with a view to investigate the traces of Norwegian intercourse with Scotland, was gratified by the discovery that the name of Hávardsteigr, which was conferred on the scene of Earl Havard's slaughter by his nephew, about the year 970, is still applied among the peasantry to the promontory of Stennis; the Stones of which we may well believe were grey with the moss of centuries ere the first Norwegian prow touched the shores of Pomona.[1] No direct reference to Stennis occurs in the Orkneyinga Saga, but the remarkable passage referred to is to be found in that of Olaf Trygvesson, where it is said:—"Havard was then at Steinsnes, in Rossey. There was meeting and battle about Havard, and it was not long ere the Jarl fell. The place is now called Havardsteigr." So was it called in the tenth century, and so, Mr. George Petrie writes me, it is still occasionally named by the peasantry at the present day.

A few examples of the most remarkable monolithic structures of the Scottish mainland may be noted here. Careful and minute accounts have already been furnished of those of Inverness-shire by Mr. George Anderson in the Archæologia Scotica;[2] and of those of Aberdeenshire, Argyleshire, and various other Scottish districts, in a series of illustrated papers in the Archæologia.[3] The varieties apparent in their grouping and structure are such as may well justify

[1] The name Stennis, of Norwegian origin, was obviously the apposite description suggested to the first Scandinavian voyagers by the appearance of the singular tongue of land, crowned by its monolithic circle; but the death of Earl Havard, as mentioned in the Northern Sagas, conferred on it new associations and a corresponding name. Professor Munch, whose natural bias as a Norwegian might have inclined him to claim for his countrymen the erection of the Great Scottish Circle, remarks, in a recent letter to me:—"Stennis is the old Norn *Steinsnes*, that is, 'the promontory of the stones;' and that name it bore already when Hávard fell, in the beginning of the island, being Scandinavian. This shows that the Scandinavian settlers found the stones already standing;—in other words, that the standing stones belonged to the population previous to the Scandinavian settlement."

[2] Archæol. Scot. vol. iii. p. 211.

[3] Archæologia, vol. xxii. p. 56; vol. xxv. p. 614, &c.

the conclusion that instead of being the temples of a common faith, they are more probably the ruins of a variety of edifices designed for diverse purposes, and it may be even for the rites of rival creeds. This at least is certain, that the latest if not the only unquestionable evidence of their use which we possess is not as religious temples but as courts of law and battle-rings, wherein the duel or judicial combat was fought, though this doubtless had its origin in the invariable union of the priestly and judicial offices in a primitive state of society. The several concentric circles so frequently characterizing them, add to the probability of their adaptation to the purpose of judicial or deliberative assemblies. Such is one of the most common marks of the Law Tings of Orkney and Shetland, and of the Isle of Man. "Not unfrequently the fences of a ting were concentric; the intent of which was to preserve among the different personages of the ting a proper distinction of rank. The central area was always occupied by the laugman, and 'those who stood with him;' and the outer spaces by the laugrettmen, out of whom the duradom was selected, the contending parties, and the compurgators."[1] Mr. George Petrie has called my attention to several evidences of this in relation to the Orkney circles, and no less remarkable proofs appear in various chartularies and other authentic records, showing at how early a period all ideas of association with the rites of Pagan superstition had been lost. Thus in the Aberdeen Chartulary a notice occurs of a court held "apud stantes lapides de Rane en le Garuiach," on the 2d May 1349, when William de St. Michael was summoned to answer for his forcible retention of certain ecclesiastical property;[2] and again in the Chartulary of Moray the Bishop of Moray is summoned, in the year 1380, to attend the court of Alexander, Lord of Regality of Badenoch, and son of Robert II., to be holden "apud le standand stanys de la Rathe de Kyngucy estir." Part of the business of the court was to inquire into the titles by which the Bishop held certain of his lands, and as he is summoned as a vassal, and had to protest against the proceedings, he is described as standing "*extra circum.*"[3]

The temple group at Leuchar, in the parish of Skene, Aberdeenshire, consists of a circle measuring internally thirty-four feet in diameter, composed of eight large stones disposed at regular intervals. In the centre of this another circle is formed of smaller stones, mea-

[1] Hibbert on the Tings of Orkney and Shetland. Archæol. Scot. vol. iii. p. 141.

[2] Regist. Episcop. Aberdon. vol. i. p. 79.

[3] Regist. Episcop. Morav. p. 184.

suring about thirteen feet in diameter, and around it six smaller stone circles are disposed, two of them touching one another, and the remainder separated by regular intervals. At a short distance from this group, nine other circles occur, similar to the smaller ones, and two large cairns occupy commanding sites in the neighbourhood. Other examples of combinations of circles somewhat resembling this have been noted; and many of the larger ones have a stone laid flatways in the circumference of the circle, which is usually designated the altar stone. Concentric circles are still more common. The great temple or Clachan of Inches, situated about two miles south of Inverness, is the largest and most entire in that part of the country. It consists of two circles, the inner one of which is composed of twenty-eight stones, and measures about forty feet in diameter. The outer circle is now only partially traceable. Fifteen stones remain, including one nine feet in height above ground, and the diameter measures above seventy feet. Another remarkable group occurs about half-a-mile eastward from a stone avenue near the farm of Milltown of Culloden, which may possibly have been once connected with it. Three concentric circles are nearly united to an adjoining one which incloses a group of five cairns, or what might be more accurately described as one gigantic cruciform cairn. The contents of this singular structure would probably amply repay the archæologist for the labour and cost of exploration. In 1824 Henry Jardine, Esq., King's Remembrancer, exhibited at a meeting of the Society of Antiquaries of Scotland, a sceptre or rod of office, dug up in the circle of Leys, Inverness-shire. It consisted of a rod of pure gold, bent at top like an Episcopal crozier or Roman *lituus*, which it is not unreasonable to imagine may have been borne by some ancient archpriest or king in the great assemblies of his people. A golden funicular rod made of three pieces twisted together, and with a solid hook at each end, was dug up in County Antrim in 1808.[1]

Monolithic groups abound in many parts of the mainland as well as in the Western Isles, but nearly all characterized by some peculiarity. Some are inclosed by a trench, others by a fosse; and frequently the space between the great stones is filled up by an earthen wall. In several districts in the south of Scotland single and double ovals are found, and fragments of ancient groups, more or less imperfect, are common throughout the country. The woodcut represents

[1] Archæologia, vol. xvi. p. 353.

an imposing monolithic group in the neighbourhood of Pitlochrie, Perthshire. One of the great level Highland moors stretches away beneath the eye, like a dark waveless lake, contrasting with the distant

Standing Stones at Pitlochrie.

heights, among which Benlawers rears its pyramidal summit to an elevation of upwards of 4000 feet above the level of the sea. Amid this wild Highland landscape the huge standing stones, grey with the moss of ages, produce a singularly grand and imposing effect; and from the idea of lofty height which the distant mountains suggest, they convey a stronger impression of gigantic proportions than is produced even by the first sight of the giant monoliths of Salisbury Plain.

The most remarkable of the Hebridean groups is that of Classernish, near Loch Roag, in the island of Lewis. It consists of a circle sixty-three feet in diameter, with a column in the centre measuring thirteen feet in height, and an avenue of similar stones stretching to the north, while single rows placed towards the other cardinal points complete the cruciform arrangement of the whole. Its greatest length is stated by Logan as 558 feet, and by Macculloch as about 680 feet; but many of the stones are nearly buried in the moss, so that its extreme limits are very imperfectly defined. It appears to have consisted originally of about seventy columns, and smaller circles in the same neighbourhood attest the ancient presence of a numerous population on the long desolate waste, where the grey columns of Classernish are still imposing in their ruins. The magnitude and singularity of this monolithic group have excited the enthusiasm of Celtic antiquaries, some of whom have discovered in it the very hyperborean

temple of the ancients, in which, according to Eratosthenes, Apollo hid his golden arrow![1] But perhaps the most interesting of all the temple groups of the Hebrides, is one which furnishes the same indisputable evidence of remote antiquity to which repeated reference has been made. It may perhaps be thought a more potent weapon even than the hammer of Thor, in demolishing the exclusively Scandinavian theory of their origin. In the same island of Lewis a large stone circle may be seen, which within memory of the present generation was so nearly buried in the moss that the surrounding heather and rushes sufficed to conceal the stones. It has now been cleared out to a depth of fifteen feet, by the annual operations of the islanders, in cutting peats for their winter fuel, and as yet without exposing the bases of any of the columns. My authority for this interesting fact is Dr. Macdonald, a gentleman who resided for some years as a medical practitioner on the island, during which time he was accustomed to watch the progressive exhumation of the long-buried Celtic temple with mingled feelings of interest and curiosity. But this is not a solitary example. On various parts of the mainland monolithic groups still remain partially entombed in the slowly accumulating mosses, the growth of unnumbered centuries. On one of the wildest moors in the parish of Tongland, Kirkcudbrightshire, a similar example may be seen, consisting of a circle of eleven stones, with a twelfth of larger dimensions in the centre, the summits of the whole just appearing above the moss. Adjoining the group there stands a large cairn with its base doubtless resting on the older soil beneath. With such evidence at command, it is manifest that however vague many of the speculations may be which have aimed at the elucidation of rites and opinions of the Celtic Druids, and have too often substituted mere theory for true archæological induction, we shall run to an opposite error in ascribing to a Scandinavian origin structures manifestly in existence long prior to the earliest Norwegian or Danish, or even perhaps Celtic, descent on our coasts.

The Scottish cromlech, which belongs to the same period as the standing stones and circular temples, has already been referred to under its true head of Sepulchral Memorials; it need only be added, that some at least of the smaller stone circles appear to belong to the same class, and to have been only the encircling monument that marked out the spot consecrated by the dust of some mighty chief,

[1] Logan's Scottish Gael, vol. ii. p. 322; Macculloch's Highlands and Isles, vol. iii. p. 232.

or formed subsidiary features of a group in which the ruined cromlech still forms the most prominent object. But the idea of a temple has become so indelibly associated even in the minds of intelligent antiquaries with the circle of standing stones, that even when such circles are found in groups, the convenient name is still retained. "Nearly in a line between East and West Law, Fifeshire," says Lieutenant-Colonel Miller, in his inquiry respecting the site of Mons Grampius, "there are no less than eight Druidical temples." To account for such a state of things we shall next be compelled to assume that old Scottish Druidism was split into even more rival sects than modern Scottish Presbytery, and perhaps be taught to decipher from the symbolism of the rude monoliths, their number, or their orientation, the degree of heresy that characterized each Druidical conventicle! Such speculations cannot, after all, surpass the extravagant and baseless theories of Sabaism, fire-worship, Druidism, astrology, &c., which have been already deduced from the number of stones, the direction of the entrance, or other equally slight and constantly varying elements of argument.

One other and still more remarkable class of works remain to be noted: These are the Rocking Stones, which are found among the ancient monuments of England and Ireland, as well as on various parts of the Continent, and are no less frequent in Scotland. No evidences of ancient skill or of primitive superstitious rites are more calculated to awaken our astonishment and admiration of their singular constructors. There is so strange a mixture of extreme rudeness and great mechanical skill in these memorials of the remote past, that they excite greater wonder and awe in the thoughtful mind than even the imposing masses inclosing the sacred area of Stonehenge or the circle of Stennis. It would, I imagine, prove a much more complicated problem for the modern engineer to poise the irregular and amorphous mass on its point of equilibrium, than to rear the largest monolithic group that now stands to attest the mechanical power which the old builders could command.

It has indeed been supposed by some that the origin of Rocking Stones is traceable entirely to natural causes, and this opinion is now adopted by Worsaae and other Danish and Norwegian antiquaries.[1] Such a theory, however, seems to stand fully as much in need of proof as that which regards them as stones of ordeal, by which the

[1] Primeval Antiquities of Denmark, p. 110.

Druid or Scandinavian priests were wont to test the guilt or innocence of the accused. Apollonius Rhodius speaks of rocking stones placed on the apex of tumuli, and Mr. Akerman refers, in his Archæological Index, to the famous Agglestone Barrow, in the island of Purbeck, as having been similarly surmounted.[1] One such undoubted example would abundantly suffice to overthrow this geological theory of natural formation. It is a less conclusive, though not altogether valueless argument, that some of the most remarkable logan stones of Scotland are found in the immediate vicinity of other undoubted primitive stone-works. The great rocking stone in the parish of Kirkmichael, Perthshire, for example, has already been referred to as one of a large group of stone circles, cairns, and other monuments of the same class. Its form is that of a rhombus, of which the greater diagonal is seven feet, and the less five feet, and its weight is calculated at about three tons and half a hundredweight. On pressing down either of the extreme corners, a rocking motion is produced, which increases until the arc through which its longest radius moves exceeds a foot. When the pressure has been continued so as to produce this effect, the stone makes from twenty-six to twenty-eight vibrations from side to side after it is withdrawn. A much larger rocking stone is situated on the Hill of Mealyea, in the parish of Kells, Stewartry of Kirkcudbright. Its weight is estimated at from eight to ten tons, and it is so nicely poised that it can be set in motion with the pressure of the finger. To this the name of the Logan Stone is popularly applied in the Stewartry, therein corresponding with the term used in Cornwall and other districts of England. A second rocking stone formerly existed on the same range of hills, but it was thrown down about thirty years since. Others remain in the parish of Dron, Perthshire, on a hill in the neighbourhood of the manse; in the parish of Abernethy, celebrated for its venerable ecclesiastical relics; and on the north side of the Cuff Hill, in the parish of Beith, Ayrshire; but none of them present any very special peculiarity worthy of note. It is not designed to offer a new theory here concerning the purpose of these singular "Stones of Ordeal;" nor even to pronounce on the certainty of their artificial origin; but I cannot help thinking it opposed to every doctrine of probabilities, that nature in the course of her ceaseless operations of denudation and attrition should in so many instances have *chanced*

[1] Archæol. Index, p. 34.

to wear away an amorphous rock so as to leave it poised in its centre of gravity on a single point. So numerous are the examples of rocking stones, that those who assign to them a natural origin would seem justified in anticipating the discovery of some unknown law of nature tending to such a result. But even if this extravagant doctrine of their origin is adopted, the rocking stones will still justly come within the range of archæological studies, as it can hardly admit of a doubt that they were objects of reverent estimation by the old monolithic builders. It is rare to find them far removed from a stone circle or other primitive structure, which may indeed have owed its erection to the prior existence of the rocking stone, but would more naturally suggest the old conclusion that that also originated in the same laborious contrivance and skill which reared the ponderous dolmens, cromlechs, and monolithic groups already described.

CHAPTER VI.

WEAPONS AND IMPLEMENTS.

THE singular correspondence between many of the weapons and implements of the Stone Period, in almost every quarter of the globe, has already been referred to; but there are not wanting many others presenting such national and local peculiarities as are worthy of careful noting and comparison. In this respect much still remains to be done for Scottish Archæology. A far more abundant store of materials, and a much larger class of intelligent and educated observers are required, before the subject can be placed in its true light as an elementary basis from whence to deduce the legitimate inferences involved in this branch of science. It will meanwhile help towards the establishment of a fixed nomenclature and the basis of more extended classification, as observers increase, to exhibit at one view the chief known varieties of the weapons and implements of the Scottish Stone Period.

The rude and unshapely fragments of flint known by the name of Flint Flakes, and now recognised as specimens of the first stages of weapon manufacture of the period to which they belong, have only very recently fully attracted the attention of archæologists. The merit in this, as in so many other important elementary principles of the science, is due to the intelligence and sagacity of the antiquaries of Copenhagen, and the admirable facilities afforded by the liberality of the Danish Government. The flakes of flint, which are met with in considerable abundance, appear to have been struck off from a solid mass. They are ordinarily found from about one to six inches long, and frequently present a curved form, it being apparently a property

of flint to flake off in this manner. Sometimes they occur in the simplest state; in other cases they are partially reduced to their intended form. But rude as they are, they are of the utmost value to us, from the insight which is thereby obtained into the process of manufactory of the primitive lance and arrow-head. It is obvious, from the frequent discovery of such among sepulchral deposits, that considerable value was attached to them; nor must we overlook the fact, that while flint is found in the greatest abundance both in Denmark and the south of England, there are many parts of Scotland where it is scarcely to be met with. Here, therefore, we discover the first traces of primitive trading and barter. The flint flakes were, in fact, the *raw material*, which had to be imported from other districts before the hunter of the Stone Period could supply himself with the indispensable requisites for the chase. A few examples will suffice to shew the abundance of such materials, and the circumstances under which they are found, though it will readily be believed that it is only rarely that their occurrence is noted, or falls under the observation of those who consider them of the slightest value.

In one of the cases in the Museum of the Society of Antiquaries of Scotland there is a skull found in an ancient cist, on the farm of Clashfarquhar, parish of Banchory-Devenich, Aberdeenshire, in 1822. It is chiefly curious from having on the crown of the head a hole nearly circular, and rather more than an inch in diameter, which there can be little doubt was occasioned by the death-blow. The size and cerebral development of the head nearly resembles the usual character of skulls found in the earliest cists; and it is not difficult to conceive of the wound having been inflicted with the narrow end of a stone celt. In each corner of the cist a few flint flakes were carefully piled up into a little heap. Alexander Thomson, Esq. of Banchory, remarks of them, in a letter which accompanied the donation of the skull:—"They are very proper for being made into arrow-heads, but none of them appear to have been wrought."[2] Similar relics of early art have been noted at various times in the same district of country:—"On the alluvial soil near the sea," remarks the author of the New Statistical Account of Belhelvie, "there is a bed of yellow flints, in which a number of very well formed arrow-heads are frequently found;" and in no part of Scotland are these primitive relics more abundant than in the landward districts of Aberdeenshire. In the large cairn of

[1] Archæol. Scot. vol. iii. p. 46.

Menzie, on Cairn Moor, Buchan, there was found, in a stone cist, "along with earth and bones, a dart-head of yellow flint, most perfectly shaped, and a little block, also of yellow flint, as if intended to furnish the deceased with more darts, should he have occasion for them on the passage."[1] In 1821 several flint flakes, and imperfectly formed flint implements, were found, along with two perfect arrow-heads of the same material, in an urn containing incinerated bones, on the estate of Closeburn, Dumfriesshire. The urn, and several of the half-formed flints, are now in the Scottish Museum. A similar deposit was discovered only last year (1849) by workmen engaged in digging for stones to build a march dyke between the farm of Swinie and an adjoining one on the neighbouring estate of Wells, Roxburghshire. There were four cairns, two of which, on being demolished, disclosed cists containing urns, and beside them a quantity of flint flakes of various sizes, several of which are now in my possession. Similar examples are of frequent occurrence, but one other may be noted from the unusual amount of flint flakes found with it. North of the Mull of Islay, Argyleshire, there is a road which leads from Port Ellen, in a north-easterly direction, towards the shooting lodge of Islay. At a point in this road, where it is cut into the side of the hill, distant about four miles from Port Ellen, some workmen engaged in widening the road exposed a cist in cutting into the sloping ground, within which lay a skeleton with a large quantity of flint flakes and chips beside it. A distinguished artist, who happened fortunately to be in the neighbourhood at the time of this interesting discovery, has furnished me with sketches of the locality. He describes the flint flakes as so numerous, that they formed a heap of from eighteen inches to two feet in height when removed from the cist.[2]

Other and scarcely less interesting evidences of ancient population are still observable in remote nooks of the Western Highlands, where the Dalriadic Scots first effected a settlement in the land which has borne their name for so many centuries. The road from Port Ellen to the site of the ancient cist, above described, passes for a considerable way through a narrow winding valley, studded with huge

[1] Scots Mag., Feb. 7, 1790.

[2] MS. letters, Mr. J. C. Brown, A.R.S.A. An interesting account of the discovery of numerous flint flakes, and weapons in all stages of progress, in the celebrated ossiferous cave of Kent's Hole, near Torquay, is introduced in a subsequent chapter.

boulders and detached masses of rock, preserving evidences of remarkable geological changes many ages anterior to the earliest occurrence within the range of archæological science. Similar evidences are of frequent occurrence along these western shores, where now the restless Atlantic is slowly but unceasingly gnawing the rocky coast into wilder and more picturesque forms, while it strews the stolen debris on its ocean bed, to form new strata and continents for younger worlds than ours. With these evidences of change we have not now to deal. But in various districts of the same neighbourhood, and particularly amid the scenes on which a new interest has been conferred as those in which the poet Campbell passed some of his early years, the curious traveller may descry, amid "the desolate heath" of the poet,[1] indications on the hill-sides of a degree of cultivation having existed at some former period far beyond what is exhibited in that locality at the present day. The soil on the sloping sides of the hills appears to have been retained by dwarf walls, and these singular terraces occur frequently at such altitudes as must convey a remarkably vivid idea of the extent and industry of an ancient population, where now the grazing of a few black cattle alone tempts to the claim of property in the soil. In other districts the half-obliterated furrows are still traceable on heights which have been abandoned for ages to the wild fox or the eagle. Such evidences of ancient population and industry are by no means confined to the remote districts of ancient Dalriada. They occur in many parts of Scotland, startling the believer in the unmitigated barbarism of Scotland prior to the medieval era with evidence of a state of prosperity and civilisation at some remote epoch, the date of which has yet to be ascertained; though there are not wanting periods within the era of authentic Scottish history to which some of these may with considerable probability be assigned. The very simple explanation of such ancient plough-marks which has satisfied the popular mind is apparent in the appellation of *elf furrows*, by which they are commonly known. The prevalence of these infallible tokens of former industry was noted by the Rev. George Maxwell when drawing up an account of the parish of Buittle, in Galloway, towards the close of last century. The rustic tradition by which the reverend Statist seeks to account for the greater agricultural skill of former ages, though amusing enough, is not without its value to us from the proof it affords of the extent to which such

[1] Lines written on visiting a scene in Argyleshire.

traces must have existed when they made so great an impression on the popular mind :—

"It is here to be observed," he remarks, "that there are few hills in this part of Galloway, where cultivation is at all practicable, that do not bear distinct marks of the plough. The depths of the furrows, too, plainly declare that this tillage has not been casual, or merely experimental, but frequent and successive. This should set both the ancient population and industry of this part of Scotland in a more favourable light than that in which they are usually held. It also affords probability to a tradition repeated by the country people to this day: that at a time when Scotland was under a Papal interdict, or sentence of cursing from the Pope, it was found that his Holiness had forgot to curse the hills, though he had commanded the land, usually arable, to yield no increase; and that while this sentence remained, the people were necessitated to seek tillage ground in places unusual and improbable!"[1]

Returning, however, from this digression, to the consideration of the rude primitive implements of stone and flint, and the flint flakes out of which the latter were formed,—the flint arrow and lance heads constructed from these furnish evidence of much patient ingenuity, and exhibit considerable variety of form. It is difficult, indeed, to conceive of the process by which workmen, provided with such imperfect tools as we must presume them to have possessed, were able to split the flint into flakes, and reduce these to such regular forms. The remoteness of the period when this primitive art was superseded by the workers in metal, is proved by the incorporation of the ancient flint implements into some of the most prevalent popular superstitions of the north. The terms Elf-bolt, Elf-shot, or Elfin-arrow, are invariably applied to the flint arrow-head throughout the Scottish Lowlands. The Gaelic name, *Sciat-hee*, is completely synonymous; while in Shetland and Orkney the idea of their supernatural origin is more frequently conveyed by the term thunderbolt, invariably applied to the stone celt. This variation in the popular mode of giving expression to the idea of the supernatural origin of these primitive weapons, among the inhabitants of the mainland and the northern isles of Scotland, is worthy of passing note, from the evidence it affords of one well-defined early date to which we may refer as a known period when the stone weapons were fully as much relics of a remote past, and objects of popular wonder, as now. The name still applied to the Elf-bolt, by the Norwegian peasantry, is *Tordenkiler*, or thunderstone,[2] so that we can feel little hesitation in assigning to

[1] Sinclair's Stat. Acc. vol. xvii. p. 115.

[2] They are described by this name of *thunderstones* in Sir Robert Sibbald's Portes Coloniæ et Castellæ, Plate II. Nos. 1-6.

the old Norse colonists of Orkney, the difference still discernible in these expressions of the same popular idea, and inferring from thence, what all other evidence confirms, that the Scottish Stone Period belongs to an era many centuries prior to the oldest date of her written history. The Elf-bolt is associated with many rustic fancies not yet altogether eradicated from the popular mind. It occupied no unimportant part among the paraphernalia of Scottish witches of the sixteenth and seventeenth centuries; and the occurrence of any sudden disease amongst cattle was ascribed until a comparatively recent period, to their having been shot by the fairies with Elfin arrows. This ancient superstition is not peculiar to Scotland. In Norway similar diseases, not only of cattle but of men, were called by the same name of *Alfskot*, and in Denmark, of *Elveskud*, that is, Elf-shot; though the flint arrow-head is not recognised as the bolt which furnishes for such purposes the quivers of the malignant elves. But other, and probably more ancient Scandinavian legends, prove the existence of similar northern associations with the primitive arrow-head of flint. In the "*Fornaldar Sögur Nordlanda*," or Legends from the primitive period of the North, derived from ancient manuscripts, Orvar Odd's Saga furnishes a curious evidence of this,—

Orvar Odd, who is already furnished with three iron arrows, the gift of Guse, a Fin king possessed of magic power, in the course of his wanderings is hospitably entertained by an old man of singular appearance. On the side where the old man sat he laid three stone arrows on the table near the dish. They were so large and handsome that Orvar thought he had never seen anything like them. He took them up and looked at them, saying, "These arrows are well made." "If you really think them to be so," replied his host, "I shall make you a present of them." "I do not think," replied Orvar, smiling, "that I need cumber myself with stone arrows." The old man answered, "Be not sure that you will not some time stand in need of them. I know that you possess three arrows, called the Guse's *gifts, but*, though you deem it unlikely, it may happen that the Guse's weapons prove useless, then these stone arrows will avail you." Orvar Odd accordingly receives the gift, and chancing soon after to encounter a foe who by like magic was impenetrable to all ordinary weapons, he transfixes him with the stone arrows, which immediately vanish.[1]

From references to the geographical divisions of Russia, as well as other internal evidence, this version of the legend is believed to have been written not later than the twelfth century. The tradition, however, is doubtless based on a much older belief, so that we cannot err in assuming that at the earliest period of intercourse between

[1] Fornaldar Sögur Nordlanda. Copenhagen, 1829.

Scotland and Norway, sufficiently frequent to assimilate the popular superstition of the two countries, the Stone Period was only known as a state of society so essentially different from every historic tradition with which the people were familiar, that they referred its weapons and implements to the same invisible sprites by whose agency they were wont to account for all incomprehensible or superhuman occurrences.

The Elf-arrow was almost universally esteemed throughout Scotland as an amulet or charm, equally effectual against the malice of Elfin sprites, and the spells of witchcraft. Dipt in the water which cattle were to drink, it was supposed to be the most effectual cure for their diseases, while sewed in the dress, it was no less available for the protection of the human race; and it is still occasionally to be met with perforated or set in gold or silver, for wearing as an amulet. Like other weapons of Elfin artillery, it was supposed to retain its influence at the will of the possessor, and thus became the most effective talisman against elvish malice, witchcraft, or the evil-eye, when in the hands of man. Such traditional myths of vulgar superstition are not without their value, however humble their direct origin may be. They are frequently only distorted images of important truths, and we shall find more than one occasion to recur to them for aid in reuniting the broken skein of primitive history. To follow out the simile, it may sometimes be said of them with truth, that where all other lines of connexion with the past are broken, these are only ravelled and confused.

Arrow-heads of the Stone Period are found in Scotland in great numbers, and of a considerable variety of forms. They are for the most part made of silex, though also met with of agate, cornelian, and other native pebbles, and are frequently finished with much neatness and care. The woodcut exhibits a very fine one, the full size of the original, which was found in the Isle of Skye, and is now in the collection of Mr. John Bell of Dungannon. Pennant has engraved a large cinerary urn, discovered along with three others, on opening a cairn on the hill of Down, near Banff. They contained, in addition to the incinerated remains, bone implements and flint arrow-heads, the largest of them having in it thirteen of the latter, all of the shape to which the term *barbed* is most commonly applied. This, indeed, while it appears to be one of the most artificial forms, involving the greatest amount of labour and skill in fashioning the material, is also

one of most frequent occurrence in Scotland. Those already referred to as found, along with an ancient wooden wheel, in the Blair-Drummond Moss, were of the same shape. So also were some obtained on opening a tumulus in the parish of Killearn, Stirlingshire, during the past year; and indeed they have been met with in nearly every district of the mainland, and of the northern and western isles. Lance and spear-heads of silex are also not uncommon, both in the tumuli and among the objects turned up where the scenes of primitive population are subjected for the first time to the plough. A very fine spear-head of silex, fifteen inches long, and beautifully finished, was discovered a few years since on the demolition of a cairn on the estate of Craigengelt, near Stirling. Another of somewhat smaller dimensions, also found in a cairn, on the estate of John Guthrie, Esq., Forfarshire, about 1796, is figured and described in the Gentleman's Magazine of the following year.[1]

Flint knives, though apparently less abundant than in the different Scandinavian countries, and especially in Denmark, are frequently turned up in the course of agricultural operations. In no instance that has come under my notice have implements been found in Scotland exactly resembling the curious lunar flint knives and saws of such common occurrence in Denmark and Sweden; yet examples of similar form are familiar to American archæologists among the singular contents of the great mounds explored of late years in the valley of the Mississippi, and in other districts of the North American continent. These are generally made of slate, and stone knives analogous to them appear also to have been used in the Scottish primitive periods, to supply similar necessities. In the Shetland and Orkney islands especially stone knives are common, and in other districts knives of flint, though not of the northern lunar shape, are often

[1] Gentleman's Mag. 1797, Part II. p. 200.

met with. It is perhaps of fully as much importance, in the present stage of archæological inquiries, to note the dissimilarity, as the correspondence of relics of the same period in different countries. We have already observed a resemblance so remarkable, in the implements of the Stone Period pertaining to countries alike separated by time and space, as to preclude the possibility of ascribing it to any mutual intercourse or common source of knowledge, that nothing but a correspondence in many minute details will justify the inference of international intercourse or similarity of races. Dissimilarity, however, in these primitive implements, if the means of comparison be sufficiently extensive, may suffice to establish the opposite conclusion, that little or no intercourse had existed between Scotland and those countries, such as Norway and Sweden, at least during the earliest historic periods. Little proof, indeed, is required to establish this—if we set aside the opinion, assumed without any investigation of the evidence, that the natives of ancient Caledonia lagged far behind the other races of Northern Europe in the arts of civilisation—for their primitive arts precluded the construction of fleets fitted for the navigation of the intermediate seas, and shut them up to their own native ingenuity. Still it may be that the discovery of a more complete correspondence with the stone implements of other parts of Europe will yet add to our knowledge of the first colonisation of the British Isles, and help us to follow back the track of these nomadic tribes in their wanderings from the eastern cradle land of the human race.

One of the most curious stone implements of frequent occurrence in the northern islands is what the Shetlanders style a Pech's knife. They have already been referred to as partially resembling the lunar flint knives of Norway and Denmark. But in the Scottish examples the semi-circular edge is sharp, while the straight side is thickened like the back of a common knife. Others are oval, or irregular in form, and brought to an edge round the whole circumference. One of the latter, in the Scottish Antiquarian Museum, formed of thin laminæ of madreporite, was found at one of the burghs or round towers of Shetland. It measures 4½ by 4 inches, and does not exceed, in greatest thickness, the tenth of an inch. Similar implements, in the collection of the London Antiquaries at Somerset House, are mentioned by Mr. Albert Way,[1] as probably the ancient stone in-

[1] Catalogue of Antiquities, Soc. Antiq. Lond. p. 14.

ASIATIC

struments transmitted to Sir Joseph Banks by Mr. Scott of Lerwick, in Shetland, and communicated to the Society, March 9, 1820. Sixteen were found by a man digging peats in the parish of Walls, Shetland, placed regularly on an horizontal line, and overlapping each other like slates upon the roof of a house, each stone standing at an angle of 45°. They lay at a depth of about six feet in the peat moss, and the line of stones ran east and west, with the upper edge towards the east. A considerable number of implements, mostly of the same class, were found on the clay under the ancient mosses of Blair-Drummond and Meiklewood. Some of them are composed of slate, and others of a compact green stone. They are from four to six inches long, flat, and well polished. There were also along with them a number of stone celts and axe heads, mostly made of the same hard green stone. In the Scottish collection is a knife of an entirely different form, made of light grey flint, which was found, along with a stone celt of unusual shape, within the area of a "Druidical circle," in Strachur parish, Argyleshire. Two others, recently discovered in ploughing a field in the neighbourhood of Largo, Fifeshire, totally differ from any of the numerous examples found in Denmark or Sweden. They are bent back at the point, finished with great care, have a fine edge, and appear to have been attached to bone or wooden handles. Another example, somewhat resembling these, was found in cutting a drain on the Pentland Hills, near Edinburgh, and though simpler, is also peculiar, and apparently unique in form. On showing it recently to an East-Lothian farmer, he remarked that he had frequently seen such things turned up by the plough, but had never thought them worth the trouble of lifting.

Celts[1] and hatchets, or wedges, are among the most abundant of all the relics of the Stone Period. They have been discovered in considerable quantities in almost every part of Scotland, from the remote Orkney and Shetland Isles,[2] to the shores of the Solway and the banks of

[1] I have retained the name of stone celt, notwithstanding its rejection by Mr. Worsaae and his intelligent English editor, in the "Primeval Antiquities of Denmark applied to the illustration of similar remains in England." The advantage of a fixed terminology cannot be over-estimated; but in this case the term is of great value in order to distinguish a peculiar class of stone implements more frequently found in Scotland and Ireland than the stone or flint hatchet, and to which the British antiquary has special grounds for applying it. Both Owen and Spurrel give, as the meaning of the ancient Cambro-British *celt*, a flint stone. I propose, therefore, to retain it in what is obviously its primary acceptation, applying the name of bronze celt to the metal weapon afterwards substituted for it.

[2] *Vide* Hibbert's Shetland, pp. 247-250.

the Tweed. They are frequently found rudely executed, with little appearance of labour except at the edge; while other examples are characterized by the highest finish and the utmost degree of polish that the modern lapidary could confer on them. The manner of attaching the stone celt to a handle has been made the subject of some discussion, though sufficiently illustrated by the practice of the modern Polynesians and other savage tribes still using weapons of stone. M. Boucher de Perthes has succeeded in throwing some new light on the subject by researches in the neighbourhood of Abbeville, which point to the conclusion that the French celt has been inserted into the hollow portion of a stag's horn having a perforation in it to receive the handle.[1] Various other methods, however, have been shewn by which this primitive weapon could be hafted, so as to become available for the war axe of the northern warrior. The example found in the earliest ancient canoe of the Clyde, leaves no room to doubt that it was bound to the handle by thongs or portions of the haft passing round the middle. Both ends are highly polished, while the middle remains rough, having evidently been designed to be covered and concealed.[2] One stone celt has been found in Ireland, near Cookstone, in the county of Tyrone, still attached to its wooden handle, the artless rudeness of which could hardly be surpassed.[3] Much more efficient means, however, are frequently seen employed in corresponding weapons brought from the South Sea Islands than any of the ancient examples display; and these may suffice to illustrate the improved methods which experience would suggest to the rude Caledonian aborigines.

Hatchets.

The stone celt must unquestionably be regarded as a weapon of war. With its thick round edge, when wielded at the end of a long handle, similar to those to which we see the stone axes of the Polynesian savages attached, it would prove an effective lethal weapon,

[1] Antiquités Celtiques et Antidiluviennes.

[2] *Vide ante*, p. 35.

[3] Archæological Journal, vol. iv. p. 3.

but very few examples of it could be applied to any useful purpose as tools. The flint or stone hatchet was more probably the implement which, with the ever-ready aid of fire, sufficed to hew down the oak, to split and reduce it into requisite forms for domestic uses, or to shape and hollow it out into such rude canoes as have been described in a former chapter. Still it is difficult to draw any very definite line of distinction between the artificer's and the warrior's axe, the same implement having doubtless been often employed in waging war on the leafy giants of the old Caledonian forests, and on rival tribes who found a home within their fastnesses. The most perfect, indeed, of the stone hatchets seem ill adapted for the laborious task of felling the knotty oak, and hollowing it for the primitive canoe. But in all such considerations of savage arts it must be borne in remembrance that time, which forms so important an element in modern estimate, hardly comes into account with the savage. Armed with no better tools, the Red Indian, on the shores of the Pacific Ocean, is known to cut an incision in the bark round the root of the tree destined for his canoe; into this he places glowing embers until it is charred to a considerable depth, and by the alternate use of the hatchet and the fire the largest tree is brought to the ground, and by the same ingenious process adapted to bear its owner on the open seas.

A very interesting discovery of an example of the use of the stone battle-axe, or celt, is thus described in a letter from Captain Dennistoun to Mr. Train. About the year 1809, Mr. M'Lean of Mark found it necessary, in the course of some improvements on his farm, to remove a large cairn on the Moor of Glenquicken, Kirkcudbrightshire, which popular tradition assigned as the tomb of some unknown Galwegian king, styled Aldus M'Galdus:—"When the cairn had been removed, the workmen came to a stone coffin of very rude workmanship, and on removing the lid, they found the skeleton of a man of uncommon size. The bones were in such a state of decomposition, that the ribs and vertebræ crumbled into dust on attempting to lift them. The remaining bones being more compact, were taken out, when it was discovered that one of the arms had been almost separated from the shoulder by the stroke of a stone axe, and that a fragment of the axe still remained in the bone. The axe had been of green stone, a species of stone never found in this part of Scotland. There were also found with this skeleton a ball of flint, about three inches in diameter, which was perfectly round and highly polished, and the head of an

arrow, also of flint, but not a particle of any metallic substance."[1] Many of the most highly-finished celts and hatchets found in Scotland are made of the same green stone, which is susceptible of a beautiful polish. Other implements of this period are chisels of flint, nearly resembling those of Norway and Denmark. Several examples are in the Scottish Museum; and a curious instance of a perforated chisel, similar to those frequently found in Denmark, was turned up in 1841, in trenching a piece of ground near the Church of Lismore, Argyleshire. It is of the usual square form, measuring four inches long, and is described in the New Statistical Account as a stone needle.[2] Another and larger class of Scottish implements are cylindrical or oval perforated stones, of which no examples, I believe, have yet been found in Denmark or Sweden. The woodcut represents one of these implements, measuring 8¼ inches in length, found in a cist near North Berwick Abbey, East-Lothian, where many primitive remains have been discovered. It is flattened at the end where it is perforated, and is made of a very hard polished stone. Another was found in 1832, in the parish of Lumphanan, Aberdeenshire; and similar implements are occasionally mentioned among the contents of Scottish tumuli. In a cist, discovered under a barrow, in Kirkurd parish, Peeblesshire, there were various weapons of flint and stone, including one described as resembling the head of a halbert, another of a circular form, and the third of a cylindrical shape; in all probability a celt, a spherical flint or stone, and one of the implements now referred to, which may be conveniently designated as *flail-stones*.[3] On levelling a large tumulus a few years since, at Dalpatrick, Lanarkshire, a cist was discovered inclosing an urn. Two other specimens of fictile ware, one of them supposed to be a lamp, were found imbedded in the surrounding earth, and also a flail-stone made of trap rock. It is described as "a curious whinstone, of a roundish form, about four inches in diameter, perforated with a circular hole, through which the radicle of an oak growing near the spot had found its way."[4] Similar stone implements have been fre-

[1] New Statist. Acc., Kirkcudbrightshire, vol. iv. p. 332.

[2] New Statist. Acc., Argyleshire, vol. vii. p. 243.

[3] Sinclair's Statistical Account, vol. x. p. 186.

[4] New Statist. Acc. vol. vi. p. 734.

quently met with in Scotland, and were perhaps designed for use as offensive weapons, attached to a leather thong or secured by such means to the end of a shaft, like a modern flail. The Shoshonee Indians, and other North American tribes, used such a weapon under the name of a *Pogamoggon;* the stone not being perforated, but inclosed in leather, by which it was fastened to the handle. Other tribes of the Mississippi valley had a simpler form of the same weapon, possibly corresponding to the spherical relics of flint or stone occasionally found with these, consisting of a grooved ball attached to a long leather thong, which they wielded, like a slung-shot, with deadly effect.[1] A medieval offensive weapon, constructed on the same principle, bore the quaint name of "The Morning Star," an epithet no doubt suggested by its form; as it consisted of a ball of iron armed with radiating spikes, attached by a chain to its handle. Like the ruder flail-stone, the morning star, when efficiently wielded, must have proved a deadly weapon in the desultory warfare of undisciplined assailants; but whenever the value of combined operations was discovered and acted upon it would have to be thrown aside, as probably more fatal to friends than to enemies. In the Scottish flail-stones the perforation is bevelled off so as to admit of their free use without cutting or fraying the thong by which they were held. We shall not probably greatly err in assuming these to be the first "*morning stars*" of that old twilight, in the uncertain light of which we are groping for some stray truths of the infancy of history.

A stone implement in my own possession, somewhat similar in general form to these flail-stones, was found beside a group of cists near North Berwick, East-Lothian, but its original destination is obvious. It is made of hard sandstone, of a flattened oval form in section, and is worn on the two alternate sides where it has been used as a whetstone—a use for which the hardness and high polish of the others render them totally unfit.

Not the least curious among the primitive relics in the celebrated museum of northern antiquities at Copenhagen, are the various whetstones, some of which have been found in barrows and elsewhere under ground, with half-finished stone-wedges lying upon them, as if the workman had been suddenly interrupted by death in the midst of his laborious industry, and his unaccomplished task had been deemed the fittest memorial to lay beside him. It formed no part of the old Pagan

[1] Ancient Monuments of the Mississippi, p. 219.

creed that "there is no work nor device in the grave." Possibly enough the buried celt-maker was expected to resume his occupation and finish his axe-grinding in the spirits' land. No similar example has yet been noted in Scotland, though smaller hand whetstones, like the one found at North Berwick, are not uncommon. One which is described as very smooth and neat, was obtained among the contents discovered on excavating within the area of the vitrified fort of Craig Phaidrick, near Inverness;[1] several such were found in cists at Cockenzie, East-Lothian; and Barry mentions among the miscellaneous contents of the tumuli or cists in the island of Westray, "a flat piece of marble, of a circular form, about two inches and a-half in diameter, and several stones, in shape and appearance like whetstones that had never been used."[2]

Great as are the numbers and varieties of the stone weapons and implements of Denmark, compared with those found in Britain, they appear to be surpassed in both respects by the corresponding relics of the Mexican Stone Period. Such facts suggest the inference, which history in some degree confirms, that the metallurgic arts were earlier known in Britain than in Denmark, thereby superseding the arts of the stone-workers before they had been elaborated as elsewhere; while in Mexico, Yucatan, and throughout the districts of the North American continent, where a native civilisation is known to have prevailed, iron was totally unknown, and copper had not completely superseded the stone hatchet and arrow-point when Columbus opened a way to that new world. But who shall say how many more curious and noteworthy reminiscences of the past may have been ignorantly destroyed in Scotland, among the thousands of burial-mounds annually invaded by the unlettered peasant in his agricultural labours.

Among the larger implements of this period the most remarkable and varied are the Stone Hammers and Axes. They are of common occurrence, and present a variety of forms, evidently designed to adapt them to a considerable diversity of purposes. They are therefore available as evidence in estimating the degree of inventive talent manifested in the primitive state of society in which they were produced, showing as they do the intelligent savage coping with the untractable materials with which he had to deal, and supplying many deficiencies by his own ingenuity and skill. With these, as with the

[1] Archæol. Scotica, vol. iv. p. 188.

[2] Barry's Hist. Orkney Islands, p. 206.

elf-bolts of the same period, we find in the reminiscences of early superstition the evidence of their frequent occurrence long after all traces of their origin and uses had been obliterated by the universal substitution of metallic implements. As we find the little flint arrow-head associated with Scottish *folk-lore* as the Elfin's bolt, so the stone hammer of the same period was adapted to the creed of the middle ages. The name by which it was popularly known in Scotland almost till the close of last century was that of the Purgatory Hammer. Found as it frequently was within the cist and beside the mouldering bones of its old Pagan possessor, the simple discoverer could devise no likelier use for it than that it was laid there for its owner to bear with him "up the trinal steps," and with it thunder at the gates of purgatory till the heavenly janitor appeared, that he might

"ask,
With humble heart, that he unbar the bolt."[1]

The stone hammer is frequently found in the older cists. In 1832 a farm-servant while ploughing a field on the farm of Downby, in Orkney, struck his ploughshare on a stone which proved to be the cover of a cist of the usual contracted dimensions, in which lay a skeleton that seemed to have been interred in a sitting posture. At the right hand lay a highly polished mallet-head of gneiss, beautifully marked with dark and light streaks.[2]

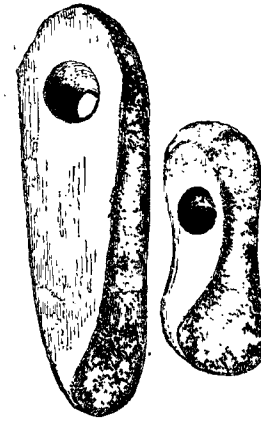
Stone Hammers and Axes.

The examples figured here furnish a few of the most characteristic varieties of Scottish hammers that have been preserved. They by no means equal in number those found in Denmark, Sweden, and Norway. But only a very partial and extremely superficial investi-

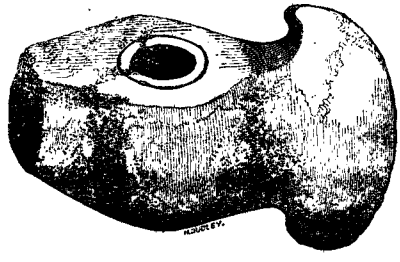
[1] Carey's Dante, Canto ix. l. 97. [2] MS. Soc. Ant. Scot. Rev. Charles Clouston.

gation of such relics has yet been made, and we possess no national collection in Scotland, similar to that of the Christiansborg Palace of Copenhagen, to which the whole available financial and legal machinery of the kingdom is employed in gathering the primitive national antiquities so soon as they are discovered. The Old and New Statistical Accounts abound with notices of opened tumuli and cairns, and of their valuable archæological contents; but unfortunately in nearly every case these are either conveniently ascribed to Romans and Danes, or mentioned so vaguely that no use can be made of them as illustrations of the period to which they belong.

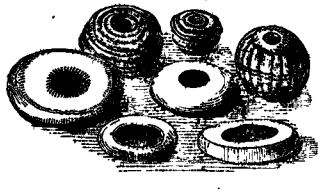
The name of Axe is, with sufficient appropriateness, applied to the double-edged stone implements, and to those of a wedge-shape which have the aperture for inserting the handle near the broad end, whereas other examples perforated sufficiently near the centre to admit of the free use of both ends are with equal propriety styled hammers. They are frequently finished with great neatness and art; not made, like the hatchet, of flint, but of a variety of kinds of stone, from the gray granite, of which the largest are generally made, to trap and even sandstone. Several examples have been discovered in an unfinished state, furnishing curious illustration of the laborious process of manufacture. One large one in particular in the Scottish Museum was found in digging the Caledonian Canal. It is made of gray granite, very symmetrically and beautifully formed, and with the hole partially bored on both sides. This was probably effected with water and sand by the tedious process of turning round a smaller stone until the perforation was at length completed. Tried therefore by the standard of value of the Stone Period, the hammer was perhaps a more costly deposit in the tomb of some favourite chief than the golden armillæ of later times. The Danish antiquaries are familiar with examples of unfinished stone implements, and also with a still more curious class, consisting of broken hammers and otherwise mutilated instruments, which have been perforated with another hole or ground to a new edge, affording striking evidence of the value of such implements to their primitive



owners. The example figured here, partaking of the characteristics both of the hammer and axe, was dug up on the farm of Dell, in the parish of Abernethy, and is engraved from a sketch by the late Sir Thomas Dick Lauder, Bart. It measures eight inches in length, and was found at a depth of about five feet from the surface, in a soil consisting of two feet of mould lying above peat moss.



The following class of objects includes a variety of stone implements the uses of which are extremely doubtful or altogether unknown, though they are often found along with other relics of the Stone Period. The woodcut represents various examples of perforated stone balls, such as are frequently met with, and to which it may be convenient to apply the name of *Bead-stones*. Some of them are decorated with a variety of incised lines, and may have been worn as marks of distinction or as personal ornaments held in great esteem, as they are not uncommon among the relics deposited in the cist or cinerary urn. One plausible theory of their use which has been suggested is that they are the stone weights used with the distaff, and they have accordingly received in Germany the name of *Spindelstein*. The Scottish *whorle*, or fly of the spinning-rock, however, is still familiar to us, and bears only a very partial resemblance to these perforated balls; consisting generally of a flattened disc, much better adapted for the motion required in the distaff. But independently of this, these rude ornaments have been found alongside of male skeletons, and in such numbers as might rather induce the belief that they had formed the collar of honour of some old barbarian chief, esteemed as no less honourable than the golden links of rue and thistle worn by the knights of St. Andrew at the court of the Scottish Jameses. As such, therefore, they should be classed with the personal ornaments of the same period, but their use is still open to question, and they may therefore meanwhile not unfitly rank with the other objects treated of in this chapter.



On demolishing a cairn at Dalpatrick, in Lanarkshire, a few years ago, it was found to cover a cist inclosing an urn, and in the surrounding heap were discovered another urn about six inches high, a smaller vessel of baked clay, and a curious whinstone of roundish form, about four inches in diameter, and perforated with a circular hole.[1] "In one of the Orkney graves," says Barry, "was found a metal spoon, and a glass cup that contained two gills Scotch measure; and in another a number of stones formed into the shape and size of whorles, like those that were formerly used for spinning in Scotland."[2] Two of these bead-stones in the Museum of the Scottish Antiquaries were discovered in Dumbartonshire, along with various smaller ones, some of them of glass and undoubtedly designed as ornaments. Other examples are more in the form of a truncated cone, and are referred to in a later chapter as perhaps the table-men for a game somewhat similar to that of draughts, and still called by the Germans *Brettsteine*. Larger perforated stones have also been found. Mr. Joseph Train describes several obtained in Galloway, five or six inches in diameter, one of which, in his own possession, as black and glossy as polished ebony, had been picked up in the ruins of an old byre, where it had doubtless been used, according to the ideas of that country-side, to counteract the spells of witchcraft.[3] Others formed of slate are of frequent occurrence in the Portpatrick parish, Wigtonshire, and are not unknown in other districts.[4]

Unperforated spherical stones, generally about the size of an orange, have been referred to along with other contents of the Scottish tumulus. It is not always possible to distinguish these from the stone cannon ball which continued in use even in James VI.'s reign. The circumstances under which they occur, however, leave no room to doubt that they ranked among the articles held in esteem by the primitive races of Britain, ages before the chemical properties of nitre, sulphur, and charcoal had been employed to supersede older projectile forces. The distinction is further confirmed by their being occasionally decorated with incised circles and other ornaments, as in the example shewn here, found near the line of the old Roman way which runs through Dumfriesshire on its northern course from Carlisle. Another of highly polished flint has already been described among the remarkable

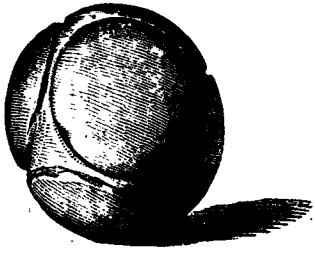
[1] New Stat. Acc., Lanarkshire, vol. vi. p. 734.

[2] Barry's Orkney, p. 206.

[3] New Stat. Acc., Kirkcudbrightshire, vol. iv. p. 196.

[4] New Stat. Acc., Wigtonshire, p. 143.

disclosures of a large cairn on the Moor of Glenquicken, Kirkcudbrightshire, and two of similar form were shewn me recently as a part of the contents of a cist opened in the course of farming operations on the estate of Cochno, Dumbartonshire, one of which was made of highly-polished red granite, a species of rock unknown in that district. Similar balls occur among the relics found in the barrows of Denmark.



In the "Report addressed by the Royal Society of Northern Antiquaries to its British and American Members," printed at Copenhagen in 1836, a class of primitive objects are described under the name of Corn Crushers. The engraving of one of these represents a rude block of stone flattened on the upper side. In the centre of this is a circular cavity, into which a smooth ball of stone has been made to fit, thereby supplying by a less efficient means the same purpose aimed at in the querne, discovered so frequently under a variety of shapes among the relics of various periods of early Scottish history. The shallow circular stone troughs or mortars so often found in Scottish burghs and weems belong to the same class. A still ruder device consists of a pair of stones which have evidently been employed in rubbing against each other, and it may be presumed with the same object in view, that of bruising the grain for domestic use. They have been occasionally noticed among the chance disclosures of the spade or plough in Scotland, and are of common occurrence in the Irish bogs. The author of the Account of Halkirk Parish, Caithness, thus describes the mortars above referred to, and also the pestles or crushers—manifestly a similar device to the Danish corn crushers—which are found together in the burghs:—"I have seen in them numbers of small round hard stones, in the form of a very flat or oblate sphere, of 2½ inches thick in the centre, and about four inches in diameter; also other round stones, perfectly circular, very plain and level on one side, with a small rise at the circumference, and about a foot in diameter. The intention of both these kinds of stones manifestly was to break and grind their grain."[1] It may reasonably be assumed, however, that neither the old British nor Scandinavian warrior deposited under the barrow of his chief, and alongside of his well-proved celt and spear, the homely corn crusher with which

[1] Sinclair's Stat. Acc. vol. xix. p. 59.

his wives or his slaves were wont to prepare the grain for domestic use. The decoration traceable on some of the stone balls confirms this idea; and it is more probable they were employed as weapons of war, like the *pogamoggon* of the Chippeway and Shoshonee Indians of America, some of which consisted of a spherical stone, weighing from half a pound to two pounds. This they inclosed in leather, and attached to a thong a yard and a half in length, which was wound round the wrist, the more effectually to secure its hold. Along with these objects may also be noted the roughly-shaped spherical discs of flint occasionally found with other stone relics in Scotland, and much more common in Ireland, where they bear the name of "Sling Stones."

Like other of the more remarkable primitive relics, the spherical stones have been associated with popular superstitions of a later period, and have been esteemed, along with crystal-beads, adder-stones, or water-worn perforated pebbles, and the like efficient armory of vulgar credulity, as invaluable amulets or charms.

"The stone arrow-heads," says Pennant, "of the old inhabitants of this island, are supposed to be weapons shot by fairies at cattle, to which are attributed any disorders they have. In order to effect a cure, the cow is to be touched by an elf-shot, or made to drink the water in which one has been dipped. The same virtue is said to be found in the crystal gems and in the adder-stone; and it is also believed that good fortune must attend the owner; so, for that reason, the first is called *Clach Bhuai*, or the powerful stone. Captain Archibald Campbell showed me one, a spheroid set in silver, for the use of which people came above a hundred miles, and brought the water it was to be dipt in with them; for without that in human cases it was believed to have no effect."[1] That such was no modern superstition he conceives is proved by a variety of evidence, as where Montfaucon remarks that it was customary in early times to deposit crystal balls in urns or sepulchres: thus twenty were found at Rome in an alabastrine urn, and one was discovered in 1653 at Tournai, in the tomb of Childeric, King of France, who died A.D. 480.

It appears to be only natural to the uninstructed mind to associate objects which it cannot explain with some mysterious and superhuman end; and hence the superseded implements of a long extinct race become the charms and talismans of their superstitious successors.

One other class of primitive relics remains to be noted, belonging to the same early period. These are the ornaments, weapons, and tools of horn or bone; such as the lances or harpoons already described as found alongside of the stranded whales in the alluvial valley of the

[1] Pennant's Tour, vol. i. p. 116.

Forth. Such relics are by no means rare, notwithstanding the perishable nature of the material of which they are constructed. Barry describes among the contents of the Orkney tumuli, "swords made of the bone of a large fish, and also daggers."[1] The woodcut represents what should perhaps be regarded as a bone dagger. It was found in a stone cist near Kirkwall, lying beside a rude urn, and is now in the possession of Dr. Traill. It measures 7½ inches long, and appears to be made of the outer half of the lower portion of the right metatarsal bone of an ox. The notches cut on it are perhaps designed to give a firmer hold, while they also serve the purpose of rude attempts at ornament. Their effect, however, is greatly to weaken the weapon and render it liable to break. The cross may perhaps suggest to some the associations of a later period, but little importance can be attached to so simple and obvious a means of decoration. Possibly indeed so far from its affording any indication of the influence of "the faith of the cross," it should be regarded like the incised patterns hereafter alluded to, wrought on later bronze implements, as suggestive of the use of the poisoned blade by the rude aborigines of the Stone Period. Pennant has engraved an implement of horn, carved and perforated at the thick end, found in a large urn under a cairn in Banffshire, and another, closely corresponding to it, was discovered in 1829, in a large urn dug up in the progress of the works requisite for erecting the Dean Bridge at Edinburgh.[2] A curious relic of the same class was brought to light on removing part of a remarkable cairn which still stands, though in ruins, on the summit of one of the Ochil Hills, on the northern boundary of Orwell parish, Kinross-shire. It bears the name of Cairn-a-vain, and an ancient traditional rhyme thus refers to a treasure believed to be contained in it :—

In the Dryburn well, beneath a stane,
You'll find the key o' Cairn-a-vain,
That will mak' a' Scotland rich ane by ane.

Many hundreds of cart-loads of stones have been carried off by the proprietor from this gigantic pile, for the purpose of building fences,

[1] Barry's History of the Orkney Islands, p. 206.

[2] Minutes of Society of Antiquaries of Scotland, 27th April 1829.

but no treasure has yet been found, though eagerly expected by the workmen. A rude stone cist occupied the centre of the pile, within which lay an urn full of bones and charcoal, and amongst these a small implement of bone, about four inches long, very much resembling in figure a cricket-bat notched on the edges.[1]

Various weapons of horn and bone are preserved in the Scottish collection, some of them so slender as to be rather pins or bodkins than lances. One of the latter, measuring four inches in length, and perforated at the broad end, was found in the year 1786, in the ruins of one of those ancient buildings in Caithness, popularly but perhaps not erroneously styled "Picts' houses." Alongside of it lay one of the rings of jet or shale, which are also among the more common relics found in Scottish barrows. To these instances may be added the frequent occurrence of deer's horns among the contents of tumuli, not seldom bearing similar marks of artificial cutting. Some years since a quantity of deer's horns which had been sawn asunder were discovered in a bed of charcoal, a few feet below the surface, outside the "Seamhill moat," in the parish of West Kilbride, Ayrshire.[2] A deer's horn of unusually large size, and from which the brow-antler has been cut off, is now in the Museum of the Scottish Antiquaries. It was obtained with others, on levelling a large sepulchral barrow in the neighbourhood of Elphinstone Tower, East-Lothian. Another of smaller dimensions, in the same collection, was discovered in a cist at Cockenzie, in the same county. Pennant mentions the similar discovery of a deer's horn, "the symbol of the favourite amusement of the deceased," lying beside the skeleton, in a stone cist, on the demolition of a cairn at Craigmills, Banffshire; and on opening the most conspicuous of a group of tumuli, in the parish of Alvie, Inverness-shire, a human skeleton was observed entire, with a pair of large hart's horns laid across it.[3] To these instances may be added the recent discovery of ancient oaken coffins on the Castle-hill of Edinburgh, at a depth of twenty-five feet from the surface,—more particularly described in a later chapter,—alongside which lay a deer's skull and horns of unusually large proportions.

Examples of this use of the antlers of the deer are by no means rare. It appears to offer some additional corroboration of the date assigned to those simpler rites of sepulture, which it has been suggested may

[1] New Statist. Acc. vol. ix. p. 60.

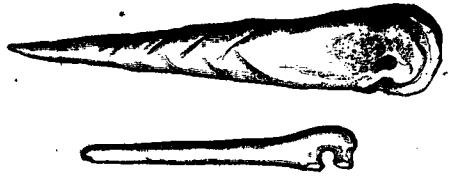
[2] New Statist. Acc. vol. v. p. 256.

[3] Sinclair's Statist. Acc. vol. xiii. p. 383. *Vide* also vol iii. p. 57. Archæological Journal, vol. ii. p. 80.

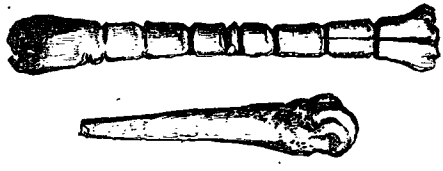
probably indicate an era prior to the introduction of the small stone cist and the practice of interment in a sitting or folded posture; that in several examples which have been carefully noted, the body has been found laid at full length, and in one or two instances with the spreading antlers at the feet, like the sculptured lion or stag which reposes on the altar-tomb of our medieval chantries at the feet of the recumbent Christian knight.

It cannot admit of doubt that bone and horn continued to supply the absence of metallic weapons to the very close of the Stone Period. Nevertheless it suggests the probable antiquity of the examples referred to, that notwithstanding the great susceptibility of the material for receiving ornament, they present so few of those incised decorations common not only on the sepulchral pottery, but on the pateræ, bead-stones, and other relics formed of the hardest materials.

One of the most interesting recent discoveries of this primitive class of implements was made by Mr. G. Petrie, during his exploration of a subterranean dwelling or weem at Skara, in the Bay of Scales, Sandwich. A large accumulation of ashes, bones of domestic animals, the tusks of a very large wild boar, scales of fish, &c., indicated the refuse of many repasts of its aboriginal occupants; and alongside of it, apparently in coeval rubbish, was found a stone cist, containing, among other remains, about two dozen oyster shells, each perforated with a hole large enough to admit the finger. Perchance they supplied to their simple owner a collar not less esteemed than the most coveted orders of a modern peer. A curious variety of bone implements were discovered at the same time. The larger of the two objects in the annexed woodcut represents a pin or bodkin, formed from the left metatarsal bone of an ox of small size, in which the natural form of the joint has been turned to account for forming its head. It measures $5\frac{3}{10}$ inches long. The smaller object is also of bone. One side of the head is broken away, but the perforation has not been in the centre; it measures $3\frac{1}{2}$ inches in length. Others of the tools are still more simple—mere flat pieces of bone, roughly rubbed to an edge, and indicating the merest rudiments of art and contrivance. Two other



examples from the same hoard are represented here, the smallest another pin, 2¾ inches long, formed from the lower end of the metatarsal bone of a sheep, and the larger, perhaps intended as the handle of some implement of delicate structure. It appears to be fashioned from the metatarsal or metacarpal bone of a lamb, and is notched with a rude attempt at ornament, which, however, as in the dagger formerly described, must have greatly impaired its strength.[1] Along with these were also found a number of circular discs of slate, about half an inch thick, roughly chipped into shape, and about the size of a common dessert plate. The most ready idea that can be formed of them is, that they were actually designed for a similar purpose.



These simple relics of the primitive period may not inaptly recall to us the evidences of another class of occupants of the old Caledonian forests. At the very era when the Briton had to arm himself with such imperfect weapons, the wolf was one of his most common foes. Long after the era of the Roman invasion the wild boar was a favourite object of the chase, though the huge Bos Primigenius, whose fossil remains are so frequently found in our mosses and marl pits, had then made way for the Bos Longifrons, (rarely accompanying relics of a later era than the Anglo-Roman period,) and the Urus Scoticus, or Caledonian bull, which still forms so singularly interesting an occupant of the ancient forest of Cadzow, Lanarkshire. The large tusks frequently found among later alluvial deposits attest the enormous size attained by the Caledonian boar; and its repeated occurrence on the sculptured legionary tablets of Antoninus' wall may show that it was pre-eminent among the wild occupants of the forests which then skirted the Roman vallum in the carse of Falkirk, and along the slopes of the Campsie hills; if, indeed, this was not the reason of its adoption as the symbol of the Twentieth Legion. On constructing a new road a few years since, along the southern side of the rock on which Edinburgh Castle stands, deer's horns and boars' tusks of the largest dimensions were found; and in an ancient service-book of the monastery of Holyrood, the ground which some of the oldest buildings

[1] The inferior articular surface [illegible]e bone has separated, which supplies evidence of its having been a lamb, union not having taken place owing to the youth of the animal.

of the Scottish capital have occupied for many centuries, is described as "ane gret forest, full of hartis, hyndis, toddis, and sic like manner of beistis." Thus is it with all that is venerable—an older still precedes it; and the docile student, when, by searching, he has found out all attainable knowledge, still sees behind him as before him an unknown, undiminished by all he has recovered. Meanwhile, it seems to become manifest, that the more minutely we investigate the primitive Scottish era, the further it recedes into the past, and approaches to the period of the first dispersion of the human family amid the strange confusion of tongues; if not indeed to that still earlier time when the sons of Javan were born after the flood, and by these were the isles of the Gentiles divided in their lands—thus leading our thoughts, as Sir Thomas Browne quaintly, but devoutly expresses it, "unto old things and considerations of times before us, when even living men were antiquities, when the living might exceed the dead, and to depart this world could not be properly said, *abiit ad plures*, to go unto the greater number; and to run up our thoughts upon the *Ancient of Days*, the antiquary's truest object, unto whom the eldest parcels are young, and earth itself an infant."

CHAPTER VII.

STONE VESSELS.

A GREAT variety of stone vessels, of different forms and sizes, have been found in Scotland under different circumstances, but in nearly all of them the rudeness of the attempts at ornament, and the whole form and character, suggest the probability of their belonging to the earliest period, coeval with the stone celt and hammer, and the bone and flint spears of the Scottish aborigines. Even sepulchral urns of this durable material are not uncommon, especially in the northern and western isles. Wallace thus describes one found in the island of Stronsa:—"It was a whole round stone like a barrel, hollow within, sharp edged at the top, having the bottom joined like the bottom of a barrel. On the mouth was a round stone."[1] From the engraving which accompanies this description it may be more correctly compared in form to a common flower-pot, decorated with a series of parallel lines running at intervals round it. In the Museum of the Society of Antiquaries of London there are two rude stone urns, believed to be the same exhibited to the Society by Captain James Veitch in 1822, which were discovered on the demolition of a cairn in the island of Uyea, Shetland, along with many similar urns, mostly broken, and all containing bones and ashes. They are formed of *Lapis ollaris*, and are described by Mr. Albert Way, in his valuable Catalogue of the Society's Collection, as two rudely-fashioned vessels of stone, or small cists, of irregular quadrangular form, one of them having a large aperture at the bottom, closed by a piece of stone, fitted in with a groove, but easily displaced. The other has a triangular aperture on one side, and is perforated with several smaller

[1] Wallace's Orkney, p. 56.

holes regularly arranged. The dimensions of the larger are about 9½ inches by 4, and the other 7 inches by 3½. Dr. Hibbert refers to

Uyea Stone Urns.

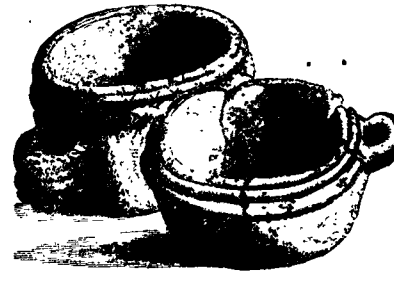
another of the same class, but probably of superior workmanship, which he saw on his visit to the Island of Uyea. It was found along with various other urns, which he simply mentions as of an interesting description, and is noted as "a well-shaped vessel, that had been apparently constructed of a soft magnesian stone of the nature of the *Lapis ollaris*. The bottom of the urn had been wrought in a separate piece, and was fitted to it by means of a circular groove. When found it was filled with bones partly consumed by fire."[1] A fragment of another such urn in the Scottish Museum is described by the donor as part of a vase of a steatitic kind of rock, found in 1829 within a kistvaen on the island of Uyea, one of the most northern of the Zetland group. At an earlier period the opening of a barrow in the island of Eigg exposed to view a large sepulchral urn containing human bones. It is described as consisting of a large round stone, which had been hollowed, with the top covered with a thin flag-stone, and was found in a tumulus which tradition assigned as the burial-place of St. Donnan, the patron saint of the isle.[2] The singular stone urn figured here, from the original in the Museum of the Royal Irish Academy, is believed to have been brought from the Hill of Nowth, in the county of Meath, one of the most remarkable chambered cairns

[1] Hibbert's Shetland, p. 412.

[2] Sinclair's Statist. Acc. vol. xvii. p. 287.

yet discovered. The urn is decorated with chevron ornaments, and figures supposed to represent the sun and moon. It is not to be imagined that, unless in some very rare and remarkable examples, cinerary urns thus laboriously hewn out of stone can belong to a period anterior to the use of those formed of the plastic clay. In so far, however, as we may judge from the few examples yet noted, they seem to be the work of a very remote era, when such were the rare and distinguished honours reserved perchance alone for the Arch-Druid, or high-priest of the unknown faith, whose strange rites were once celebrated within the *Taoursanan*, or mournful circles.[1]

Another, and much more common Scottish stone vessel, consists of a small round cup or bowl, with a perforated handle on one side, and generally measuring from five to six inches in diameter. Most of them are more or less ornamented, though generally in an extremely rude style; and they have been found made of all varieties of stone, from the soft camstone to the hardest porphyry and granite. The name by which these singular vessels have been generally designated among Scottish antiquaries, is that of Druidical pateræ; though if we are to assume the idea that they were used in the sacred rites of Pagan worship, they more nearly resemble the form of the Roman patella, than of the sacrificial patera, with which libations were poured out to the gods.



Stone Pateræ.

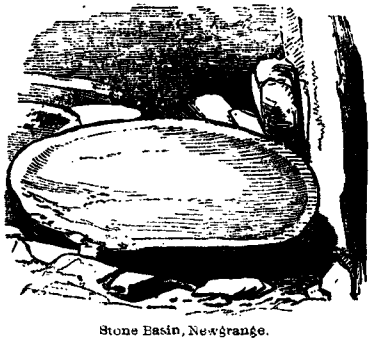
In several instances these singular vessels have been found in the immediate vicinity of the so-called Druidical circles. In 1828 two of them were discovered under an ancient causeway leading from a circle of standing stones on Donside, in the parish of Tullynessle, Aberdeenshire. One of these, the handle of which is imperfect, is now deposited in the Scottish Museum, along with various other similar examples found in different parts of Scotland. The other

[1] This is a name given to circles of standing stones in the Gaelic, from *Taoursach* or *Tuirseach*, mournful, and has been supposed to originate in the traditions of human sacrifices believed to have been offered within these inclosures. *Vide* Archæol. Scot. vol. i. p. 283. In the Journal of the Archæological Association (vol. ii. p. 340) a notice occurs of "a singular bowl-shaped cist and triangular cover of Bethesden limestone, found in Charing Church, Kent."

had a handle about nine inches long carved out of the same stone, and terminating with a knob at the end. A similar relic was found some time before, when clearing out the area of another stone circle on the farm of Whiteside, in the same county. The frequency of their occurrence, indeed, would suggest their construction for more common use than the worship of the gods, were we not led to assume their designation for some special object, from the very great labour employed in making them.

Some of the rarer forms of the stone vessels found in Scotland are much more suggestive of domestic purposes. One in my own possession, found in Glen Tilt, is neatly formed in native green marble, with two handles, not unlike the more modern Scottish quech. Another, in the Scottish Collection, found in Atholl, looks like a stone soup-ladle; and a third, of oblong form, as shewn here, measuring 12 by 8½ inches, was found at Brough, in Shetland, in excavating the area of one of the large circular buildings of uncemented stone, styled Pech's Burghs. It can hardly be more fitly described than as a stone tureen with handles carved at either end. Others met with under similar circumstances are wide and shallow, and nearly resemble the large stone basins figured here, found in the chambers of the celebrated cairn of Newgrange, in the neighbourhood of Drogheda.

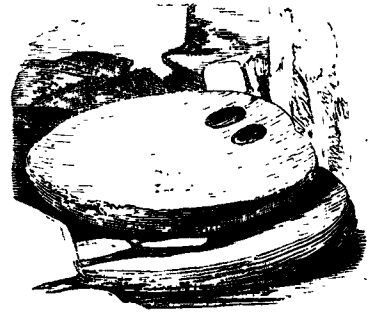
Stone Basin, Shetland.



Stone Basin, Newgrange.

It is a remarkable fact, that these vessels, thus laboriously hewn or wrought out of stone, should be most frequently found either in the neighbourhood of the rude monolithic structures, or of other apparently contemporary works of the earliest period. The very imperfect nature of many of their decorations, however, suffice to prove that they are the work of men destitute of efficient metallic tools, and who were little likely to attempt the hopeless task of hewing the giant columns of their temples into artificial forms. Many of these

vessels, indeed, notwithstanding the attempts at decoration visible upon them, exhibit much less symmetry or finished workmanship even than the stone hammers and axes of the same period. So far as I am aware, the Druidical patera, so frequently found in Scotland, is peculiar to it, no similar vessel having been discovered among the primitive remains either of England or Ireland. In the remoter districts of Scotland these ancient vessels were regarded till recently with the same superstitious awe and dread which we have already seen attached to other unfamiliar relics of the same remote era. Mr. Colin M'Kenzie, in describing the antiquities of the island of Lewis, from personal observations made towards the close of last century, remarks in reference to the group of standing stones at Classernish, on the west side of that island, with its remarkable large central stone, surrounded by a deep hollow which retains the rain water:—"Were a ditch cut across the circle to a tolerable depth, some utensils, ashes, &c. might be found to throw more light on the subject. I have been told that a stone bowl was found, and afterwards thrown, through a superstitious dread, into the hollow round of the central stone."[1]



Stone Basin Mortar.

With this class may also be reckoned the Scottish querne, unquestionably an invention of the remotest antiquity, though it has continued in use down almost to our own day in some of the western isles and other rarely visited Highland districts. A curious allusion to it occurs in the Life of St. Columba, illustrative of its daily use for the preparation of grain for bread. When the Saint studied under St. Finnian, every night on which it fell to his share to grind the corn with the querne he did it so expeditiously that his companions alleged he had always the assistance of an angel in turning the stone, and envied him accordingly.[2] At that period, that is in the early part of the sixth century, there can be little doubt that it was the only mill in use. Even so early as the thirteenth century legal means were employed to compel the people to abandon it for the large water-mills then introduced. In 1284, in the reign of Alexander III., it was provided

[1] Archæol. Scot. vol. i. p. 284.

[2] Smith's Life of Columba, p. 60.

that "na man sall presume to grind quheit, maishlock, or rye with hands mylne, except he be compelled be storm, or be lack of mills, quhilk sould grind the samen. And in this case, gif a man grinds at hand mylnes, he sall gif the threttein measure as multer; and gif anie man contraveins this our prohibition, he sall tine his hand mylnes perpetuallie." The prevalence of these simple domestic utensils in the remoter districts of Scotland till the close of the last century proves how ineffectual this law had been in superseding the querne by the public mill.

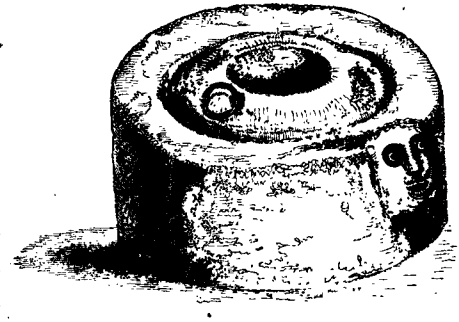
The commonest form consists simply of two thin circular flat stones, the upper one of which is pierced in the centre, and revolves on a wooden or metal pin inserted in the under one. The upper stone is also occasionally decorated with various ornaments, incised or in relief. In using the querne the grinder dropped the grain into the central hole with one hand, while with the other he made the upper stone revolve by means of a stick inserted in a small hole near the edge. The extreme simplicity of this indispensable piece of household furniture justifies its reference to remote antiquity. It has been already observed that it frequently occurs among the contents of the Scottish weems, or cyclopean underground dwellings of a very primitive state of society. It has also been dug up under a variety of circumstances, all furnishing probable evidence of great antiquity. One upper stone of a querne, now preserved in the Museum of the Scottish Antiquaries, was discovered in 1825, along with the remains of an iron sword, in digging on the summit of a hill called the Camp, near Pitlour House, Fifeshire. Another in the same collection, of still ruder form, was found built into the masonry of an ancient wall of Edinburgh Castle, demolished in 1828.

One type, in which the upper stone is funnel-shaped, with radiating grooves from the centre perforation, is believed to be the portable hand mill of the Roman soldier. It is engraved as such in Stuart's Caledonia Romana, *Plate* XIII.; and the only one of the same kind in the Scottish Museum seems to corroborate this, in so far as it was found to the south-west of Camelon, on the line of the great wall of Antoninus Pius. It exhibits, as might be expected, more regularity and method in its construction, and is surrounded with an iron band, now greatly corroded, with a loop or ear, to which the handle was attached for turning it.

We shall not, probably, greatly err in assuming as one of the

earliest types of the Scottish hand-mill, the rudely fashioned oaken querne already referred to, which was dug up from a depth of nearly five feet in the Blair-Drummond Moss. It is simply the section of an oak tree, measuring nineteen inches in height by fourteen inches in diameter. The centre has been hollowed out to a depth of about a foot, so as to form a rude oaken mortar; and in this, with the help of a stone or wooden pestle, its primitive possessor was doubtless wont to bruise and pound the grain preparatory to its conversion into food. The circumstances under which the Blair-Drummond querne was found, when compared with the other discoveries in the same locality, scarcely permit us to escape the inference that in it we possess a domestic utensil contemporary with the ancient canoes of the Forth and Clyde, if not with the stranded whales, and the rude harpoons of the carse land from which it was disinterred.

A more artificial, though very ancient form of hand-mill, is what is called the Pot Querne, consisting of a hollowed stone basin, with an aperture through which the meal or flour escapes, and a smaller circular stone fitting into it, and pierced, as in the simpler topstones, with a hole in the centre, through which the grain was thrown into the mill. The woodcut represents one of unusually large size, found on the farm of Westbank, Gladsmuir parish, East-Lothian, and now in the Scottish Museum. It is made of coarse pudding-stone, and measures 17 inches in diameter, and 8½ inches high. It appears to have had two handles attached to it at opposite sides, as the holes in which they were inserted still remain. The iron ring now fastened to it is a modern addition of its last possessor, who used it for securing his horse at the farm-house door. Pot quernes are common in Ireland, though somewhat differing in form from the Scottish examples. They are generally much smaller and shallower than the one described above, and are made with three, or sometimes four feet. They have likewise a cavity in the centre of the under stone, into which the upper one fits by a corresponding projection, so as to preclude the necessity for a metal axis. They are called by the



native Irish *Cloch a vrone.* It is from the word *vro* or *bro*, Gaelic *bra*, (the *v* and *b* in the Irish being commutable,) signifying grindings or bruised grain, that our Scottish word *brose* is derived, rather than from the French *brouet, i.e.*, pottage or broth, though both are probably traceable to a common Celtic root.

Irish pot quernes have been frequently found at great depths in the bogs, under circumstances indicating a very remote antiquity, though they have scarcely yet fallen into total disuse in some of the remotest districts of the west. Dr. Petrie incidentally furnishes a curious evidence of the antiquity of the querne. He has in his possession the topstone of one of these primitive hand-mills, which appears to have been converted to the unlikely purpose of a tombstone after its original use had been lost sight of. It has been elaborately decorated with sculptured ornaments, part of which are effaced to make way for the name of *Sechnasach*, which its learned owner conceives is probably the "Priest of Durrow," whose death is recorded in Mageoghegan's translation of the Annals of Clonmacnoise at the year 928, and in the Annals of the Four Masters at the year 931.[1]

[1] Ecclesiastical Architecture of Ireland, 2d edit. p. 342.

CHAPTER VIII.

PERSONAL ORNAMENTS.

THERE only remain to be noted the earliest traces of luxury and personal adornment contemporary with the rude weapons and implements, and the simple habitations of earth or unhewn stone, described in the previous chapters. These are scarcely less abundant than the implements of war and the chase; and some of them possess a peculiar value for us, as presenting the sole surviving memorials of female influence, and of the position woman held in the primitive social state which we desire to trace out as the true and rudimentary chronological beginning of our island history. There must necessarily be some uncertainty in any attempt to assign to the two sexes their just share of the personal ornaments found in the early tumuli, or discovered in the course of disturbing the uncultivated soil. Man, in such a primitive state as we have abundant grounds for believing the Caledonian aborigines of the Stone Period to have been, delights in assuming to himself the personal ornaments with which, in a more advanced stage of social life, he finds a higher gratification in adorning woman. It should not, therefore, excite surprise when we find ornaments which modern civilisation resigns entirely to the fair sex, such as bracelets, hair-pins, neck ornaments, and the like, mingling with the sword and the spear of the rude barbarian chief. Still, there are some ornaments, and especially bead necklaces, bracelets, and some of the smaller and more delicate armillæ, which we can hardly err in classing among female decorations. The subject, however, is well deserving of further attention, and the more so, as the evidence which is available in the case of sepulchral remains is of so satisfactory and decisive a character

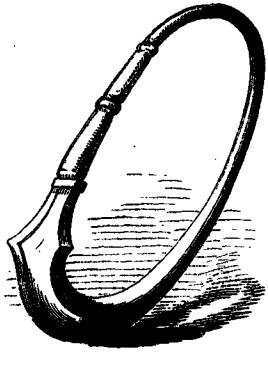
when reported on by competent witnesses. There can be no doubt, from the disclosures of numerous tumuli and cists, that the dead were frequently buried "in their habits as they lived," and with all their most prized personal adornments upon them, though time has made sad havoc of their funeral pomp, and scarcely allows a glimpse even of the naked skeleton that crumbles into dust under our gaze.

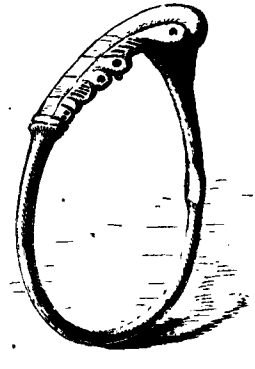
The rudest class of personal ornaments which are found in the sepulchral mounds, or in the safer chance depository of the bogs, are those formed of bone or horn; but they are necessarily of rare occurrence, not only from the remoteness of the period to which we conceive them to belong, but from the frail nature of the material in which they have been wrought, which, when deposited among the memorials of the dead, yields to decay not greatly less rapid than the remains it should adorn, and crumbles to dust when restored to light and air. Still some few of these fragile relics have been preserved, consisting of perforated beads of bone, horn pins, perforated animals' teeth, and other equally rude fragments of necklaces or pendants; but very few of them present much attempt at artificial decoration by means of incised ornaments or carving, such as is found to have been so extensively practised in a later age. One curious set of bone ornaments in the Scottish Museum includes a piece of ivory pierced with a square perforation, and another with a nut or button fitting into it, the clasp or fibula it may be of some robe of honour worn by a chief of the ancient race.

Ornaments of jet or shale and cannel coal, and large beads of glass and pebble, are of much more frequent occurrence in the Scottish grave-mounds, and furnish extremely interesting and varied evidence of the decorative arts of these remote ages. Many of them, however, are found under circumstances which leave no room to doubt that they belong to a period coeval with the introduction of metals, and the skill acquired in the practice of the metallurgic arts.

There is another class of relics, however, which we can feel no hesitation in ranking among the earliest remains of the Stone Period, though it may sometimes be difficult to determine whether we should regard them as mere personal ornaments or as charms employed in the mysterious rites of Pagan superstition, as it is not uncommon to find them used, at a very recent date, by their illiterate inheritors in some of the remoter districts of the Highlands and Isles. One relic, for example, in the Scottish Museum, consists of a flat reddish stone, roughly polished. It measures 4 inches in length, and about $2\frac{3}{4}$ inches

in its greatest breadth, and is notched in a regular form, with two holes perforated through it. It was presented to the Society of Scottish Antiquaries in 1784, as a charm in use among the population of the island of Islay for the cure of diseases. From its correspondence with others of the earliest class of relics, it can hardly admit of a doubt that it belongs to the personal ornaments of the Stone Period, and may have owed the reverence of its more recent possessor to the fact of its discovery within some primitive cist, or in the charmed circle of Taoursanan, the origin of which is commonly ascribed to superhuman powers. It is worthy of note, indeed, that the word *Druidheachd* is no longer associated with the priesthood of the British groves, but is now only used by the Scottish Highlanders as applicable to sorcery or magic. Another, but much less perfect ornament of perforated reddish stone, in the same collection with the above, was found, along with several flint arrow-heads, in the island of Harris; and a third, still ruder, was discovered, with a similar arrow-head, on the Lomond Hills of Fifeshire. But perhaps the most singular relics of the Stone Period ever discovered in Scotland are two stone collars,





found near the celebrated Parallel Roads of Glenroy, and now preserved at the mansion of Tonley, Aberdeenshire. They are each of the full size of a collar adapted to a small Highland horse; the one formed of trap or whinstone, and the other of a fine-grained red granite. They are not, however, to be regarded as the primitive substitutes for the more convenient materials of later introduction. On the contrary, a close imitation of the details of a horse collar of common materials is attempted, including the folds of the leather, nails, buckles, and holes for tying particular parts together. They are finished with much care

and a high degree of polish, and are described as obviously the workmanship of a skilful artist. Mr. Skene, who first drew attention to these remarkable relics, suggests the probability of the peculiar natural features of Glenroy having led to the selection of this amphitheatre for the scene of ancient public games; and that these stone collars might commemorate the victor in the chariot race, as the tripods still existing record the victor in the Choragic games of Athens. But no circumstances attending their discovery are known which could aid conjecture either as to the period or purpose of their construction.[1]

In the year 1832, a large tumulus, on the shore of Broadford Bay, Isle of Skye, was levelled in the progress of some improvements on the estate of Corry, and it was found to cover a rudely vaulted chamber, within which lay a cist inclosing a human skeleton, along with various bones of animals, the species of which were not ascertained. Alongside of the skeleton an ornament of polished pale green stone was discovered, measuring about 2½ inches in length, by 2 inches in breadth. Its form will be best understood by the annexed woodcut. It is convex on the upper side, and concave on the under side, with a small hole drilled at each of the four corners, and an ornamental border of slightly indented ovals along one end. It differs only in dimensions from another previously referred to, in the collection of Adam Arbuthnot, Esq., of Peterhead, which was obtained from a tumulus at Cruden, Aberdeenshire. It measures 4¼ inches in length. Another ornament of polished green stone was afterwards discovered in the neighbourhood of the tumulus at Broadford Bay. It measures about 3½ inches in length, and nearly an inch in breadth at the centre, but tapers to about half an inch in breadth at either end, where a small hole is drilled through. It is only a fifth of an inch in thickness. Simple as are the forms of both of these relics, they represent a class which appear to have been common among the personal decorations of the Stone Period, whether regarded merely as ornaments, or valued for some hidden virtue which may have been supposed to pertain to them. A sepulchral deposit, closely

[1] Archæol. Scot. vol. iii. p. 299.

corresponding to that found in the Isle of Skye, was discovered by some labourers employed in sinking a ditch at Tring, in Hertfordshire, about the year 1763. The relics were entirely of the same rude primitive class, and it furnished an example in confirmation of previous remarks regarding the earliest sepulchral rites, as the skeleton was found laid at full length, with legs and arms extended. Between the legs lay some flint arrow-heads, and at the feet ornaments resembling, both in form and material, those found in the tumulus at Broadford Bay.[1] Sir R. C. Hoare describes objects of similar character, found in the barrows of Wiltshire, some of which were made of blue slate;[2] and small perforated plates of stone or flint, of slightly varying forms, are not uncommon among the contents of the earlier British tumuli. They are not, however, confined to Britain. Simple as are the forms of the two relics figured above, there is a sufficiently marked character about them to excite our surprise when we meet with them in the grave of the ancient native of Skye, and in the cists of Herts or Wiltshire; but ornaments of almost exactly the same forms have been discovered in the mounds of the great valley of the Mississippi,[3] accompanied with celts, stone hatchets, and other primitive implements closely resembling those of the British Stone Period; though also with many more so essentially differing, as to forbid us deducing from such chance coincidences any fanciful community of origin between the Allophylian colonists of Europe and the aborigines of America.

Still ruder are the primitive necklaces, formed of the common small shells of our coasts, such as the *Nerita litoralis*, and even the *Patella vulgata*, or common limpet, perforated, apparently, by the simple process of rubbing the point on a stone, and then strung together with a fibre or sinew. It may perhaps be thought by some that sufficient space has already been devoted to this infantile period of the race, yet childish as such decorations seem, they are found among the valued relics of men whose giant monuments have outlived many massive structures destined by later ages to perpetuate the memory of historic deeds, or consecrated to the services of the all-powerful Church of medieval Christendom. Underneath the cromlech discovered on levelling a tumulus in the Phœnix Park at Dublin, in 1838, two male skeletons were disclosed, and beside the skull of each lay the perforated

[1] Archæologia, vol. viii. p. 429. Plate xxx. fig. 6.

[2] Ancient Wiltshire, Plates II. and XII.

[3] Ancient Monuments of the Mississippi Valley. Smithsonian Contributions to Knowledge, vol. i. p. 237.

shells of a necklace which had doubtless been placed around their necks when they were deposited in the simple but grand mausoleum that still attests the veneration of the ancient natives for their chiefs. A portion of the vegetable fibre with which they had been strung together remained through some of the shells, and the only other relics found in the grave were a small fibula of bone, and a knife or lance-head of flint. The common British bivalves are also found used for similar decorations. In a cist discovered on the coast of the Firth of Forth, during the construction of the Edinburgh and Granton Railway, the only relics deposited beside the skeleton which it enclosed were a quantity of the *cardium commune*, or cockle, of different sizes, rubbed down until they were reduced nearly to rings; while in another cist, opened at Orkney, and more particularly referred to in a previous chapter, about two dozen oyster shells were discovered, each perforated with a hole nearly an inch in diameter.

CHAPTER IX.

CRANIA OF THE TUMULI.

NOTWITHSTANDING the zeal with which English archæologists have pursued their investigations among the remains of primitive sepulchral deposits, scarcely anything has yet been done towards obtaining a collection of facts in relation to the size and form of the skulls, and the general characteristics of the skeletons of their constructors. In this, as in so many other respects, the archæologists of Sweden and Denmark have set us an example well deserving of imitation, and have shewn the essential dependence of Archæology on the kindred sciences, with which it has heretofore failed to effect a hearty alliance in Britain. Had Sir Richard Colt Hoare examined the osteology of the tumuli of Wiltshire with the same patient accuracy and precision which he devoted to their archæology, a most important basis would have been furnished for ethnological research. Now, however, that such investigations are recognised as coming within the legitimate scope of archæological inquiry, we may hope ere long to ascertain by such evidence somewhat of the characteristics of the aboriginal race of the Stone Period, and also to obtain an answer to the inquiry,—Was the Bronze Period superinduced on the Primeval one by internal improvement and progression, or was it the result of the intruded arts of a superior race? This, it is manifest, can only be determined by an extensive series of observations, since physiologists are generally agreed in admitting that the physical characteristics of races have been largely modified, and even entirely altered, by a change of circumstances. The nomadic Turkish tribes, for example, spread through central Asia, still exhibit the broad-faced, pyramidal

skulls which Dr. Prichard has assigned to the nomadic races, while the long civilized European Turks have become closely assimilated to other European races, and possess the characteristic oval skull.[1] "The greater relative development of the jaws and zygomata, and of the bones of the face altogether, in comparison with the size of the brain, indicates, in the pyramidal and prognathous skulls, a more ample extension of the organs subservient to sensation and the animal faculties. Such a configuration is adapted, by its results, to the condition of human tribes in the nomadic state, and in that of savage hunters."[2] Two important points, therefore, which remain to be determined in relation to the British tumuli are, whether the forms and proportions of the skulls of their builders indicate the existence of one or of several races? and next, whether the changes in the forms of the crania are sudden and decided, or are gradual, and pass by an undefined transition from the one to the other? It will be found in the succeeding section that archæological evidence clearly points to a transitional state from the Stone to the Bronze Period, such as is at least altogether irreconcilable with the idea of the sudden extermination of the aboriginal race. It at the same time no less distinctly points to the existence of a native population in Britain long anterior to the earliest historic indications of the Arian nations passing into Europe.

To these early races, which we describe loosely as primitive, or as aboriginal or primeval, Dr. Prichard has suggested the application of the conveniently indefinite term "Allophylian," which suffices to characterize them as distinct from the well ascertained primitive races, without meanwhile assuming any hypothetical origin for them. It remains to be seen whether the archæologist may not be able to supply, in a great degree, the desired information in relation to the habits, arts, and social condition of these unknown races:—

"The Allophylian nations," Dr. Prichard remarks, "appear to have been spread, in the earliest times, through all the most remote regions of the old continent,—to the northward, eastward, and westward of the Indo-European tribes, whom they seem everywhere to have preceded; so that they appear, in comparison with these Indo-European colonies, in the light of aboriginal or native inhabitants, vanquished, and often banished into remote and inaccessible tracts, by more powerful invading tribes. The latter, namely, the Indo-European nations, seem to have been everywhere superior in mental endowments. Some tribes, indeed, had retained or ac-

[1] Prichard's Natural Hist. of Man, 3d edit. p. 108. [2] Ibid. p. 21.

quired many characteristics of barbarism and ferocity ; but with all these they joined undoubted marks of an earlier intellectual development, particularly a higher culture of language as an instrument of thought, as well as of human intercourse. If we inquire into the degree of improvement in the arts of life which the Indo-European nations had attained at the era of dispersion from their primitive abode, or from the common centre of the whole stock, an investigation of their languages will be our principal guide. It gives us strong grounds for a belief that their advancement in useful arts had been comparatively small. The primitive ancestors of the Indo-European nations were probably ignorant of the use of iron and other metals, *since the terms by which these are denoted are different in different languages, and must, as it would appear, have been adopted subsequently to the era of separation.* Nothing can be more unlike than *gold*, χρυσος, and aurum ; than *silver* and argentum ; than *ferrum* and σιδηρος. Other considerations may be advanced to confirm this opinion, that the use of metals was unknown to the earliest colonists of the west. . . . . But though unskilled in many of the most useful arts of life, the Arian people appear to have brought with them a much higher mental culture than the Allophylian races possessed before the Arian tribes were spread among them. They had national poetry, and a culture of language and thought altogether surprising, when compared with their external condition and habits."[1]

The religion which consists in mere fetisses, charms, spells, and talismans is in like manner ascribed by Dr. Prichard to these Allophylian nations ; in contradistinction to the Eastern doctrine of metempsychosis, with the coincident belief in a system of retributive justice, and the distinct recognition of a future state, which appear to have been common to all the Arian nations, and to have been further developed by their being confided to a distinct order, caste, or priesthood. Of the former races the modern Fins, Lappes, and Esquimaux still remain as characteristic examples. Of the latter, the historic Celtæ, Scandinavian and German-Teutonic races are sufficiently illustrative, while the modern Hindoos are a living evidence of the south-eastern migration of the same great branch of the human family. But of the degree of civilisation of the Arian nomades when they reached the western shores of Europe, or of the state in which they found the countries which they colonized, we as yet know almost nothing ; and it still remains to be determined whether they entered into peaceful possession of unpeopled wastes, or won them from primitive Allophylian nations. On these points archæological observation may be expected to throw some light. The irregular or systematic arrangement of the cist, the provisions for the future occupation and welfare of the deceased, and all the peculiarities of primitive

[1] Natural History of Man, p. 186.

sepulchral rites, more or less clearly indicate the arts and habits of those by whom they were practised, and still more, the ideas entertained by them in relation to a future state.

Of the Allophylian colonists of Scandinavia, Professor Nillson assigns to the most ancient the short or brachy-kephalic form of cranium, with prominent parietal tubers, and broad and flattened occiput. To this aboriginal race he conceives succeeds another with a cranium of a more lengthened oval form and prominent and narrow occiput. The third race, which Scandinavian antiquaries incline to regard as that of the bronze or first metallic period, is characterized by a cranium longer than the first and broader than the second, and marked by greater prominence at the sides. The last Professor Nillson considers to have been of Celtic origin. To this succeeded the true Scandinavian race, and the first workers of the native iron ore.[1] Professor Eschricht assigns to the crania from the barrows of the oldest Danish series an ample and well-developed form, with the forehead vaulted and tolerably spacious, and the nasal bones prominent. In a skull described by him the zygomata appear large and angular, and the cranium has somewhat of a pyramidal form. The eyes have been deeply set, and the eyebrows are strongly prominent. One of the most remarkable features in these skulls is their round form, approaching to a spherical shape.[2]

The type of the old Celtic cranium is considered by Professor Nillson as intermediate to the lengthened and shortened oval, or the true dolicho-kephalic and brachy-kephalic forms, and in this conclusion Dr. Thurnam coincides. Dr. Morton describes the Celtic head as "rather elongated, and the forehead narrow and but slightly arched; the brow low, straight, and bushy; the eyes and hair light; the nose and mouth large; and the cheek-bones high."[3] Such characteristics differ decidedly from those of the early barrows. Dr. Prichard, however, hesitates to accept the conclusions adopted by Scandinavian ethnologists, attaching it may be too slight importance to the strictly archæological evidence on which they are to some extent based. He remarks in reference to the description of the skulls of the most ancient Scandinavian barrows:—"They are probably the crania of Celtic races; in Denmark of Cimbrians. The tombs containing ornaments of the precious metals are referred to a later age; but it is

[1] On the Primitive Inhabitants of Scandinavia, by Professor Nillson of Lund.

[2] Natural History of Man, pp. 192, 198.

[3] Morton's Crania Americana, p. 16.

uncertain as yet whether they belonged to the same race as the former."[1] One marked difference has hitherto existed between the systems of several of the chief continental ethnologists and those of England, which has somewhat influenced the conclusions of each. While continental investigators into the phenomena of various races have set aside the idea of one primitive stock,—some of them even assuming the primal existence of numerous distinct and independent human races,—British ethnologists, with Dr. Prichard at their head, have held fast by the Adamic history, and in maintaining the origin of all the races of man from one pair, have also given its full force to the influence of external circumstances in modifying the physical peculiarities of each race. That the progress of a people in civilisation must be accompanied with a corresponding improvement in their intellectual faculties and also in their physical conformation is now generally admitted. Long time, however, is required even under the most favourable circumstances, for any very decisive modification affecting the form and features of a whole people, so that the sudden intrusion of a foreign race must be no less readily discernible from their crania than from novel arts or sepulchral rites. Nothing has yet been done by Scottish archæologists with a view to ascertain the physical conformation of the primitive native races; and the small contribution now offered as a beginning, is founded on too limited data to be of very great avail, except perhaps in opening up the subject and leading to more extended observation. Fortunately a few skulls from Scottish tumuli and cists are preserved in the Museums of the Scottish Antiquaries and of the Edinburgh Phrenological Society. A comparison of these with the specimens of crania drawn by Dr. Thurnam from examples found in an ancient tumular cemetery at Lamel Hill, near York, believed to be of the Anglo-Saxon period, abundantly proves an essential difference of races.[2] The latter, though belonging to the superior or dolicho-kephalic type, are small, very poorly developed, low and narrow in the forehead, and pyramidal in form. A striking feature of one type of crania from the Scottish barrows is a square compact form. Though full in the middle-head, these are by no means deficient in the forehead; but it will be observed from the first class of examples in the following table of measurements, that they are generally of small relative size,—a fact which has been frequently noted, even by casual observers, when see-

[1] Natural History of Man, p. 193. [2] Archæol. Journal, vol. vi. pp. 27-39, 123-136.

ing them *in situ*, and contrasting their dimensions with the disproportionate size of the skeleton. The system of measurement employed in the following table is chiefly that adopted by Dr. Morton in his "Crania Americana," and the terms are used in the sense explained by him under the head "Anatomical Measurements," (p. 249.) From the fractured and very fragile state of many of the skulls, it was impossible to attempt the measurement of their internal capacity by the ingenious process employed by Dr. Morton. The last column in the table is accordingly found by adding the longitudinal and vertical diameters and the horizontal periphery. This is not assumed as affording any test of the actual capacity of each cranium, but only as a fair relative approximation and element of comparison. Owing to the undetermined form of the processes in several of the crania and the imperfection or total absence of the facial bones, from their greatly decayed state, the additional measurements marked * are given as less liable to error. Some of them, such as the inter-mastoid arch and inter-mastoid line, taken from the upper root of the zygomatic process instead of from the points of the mastoid processes, are also, perhaps, preferable as more uniform and precise.[1]

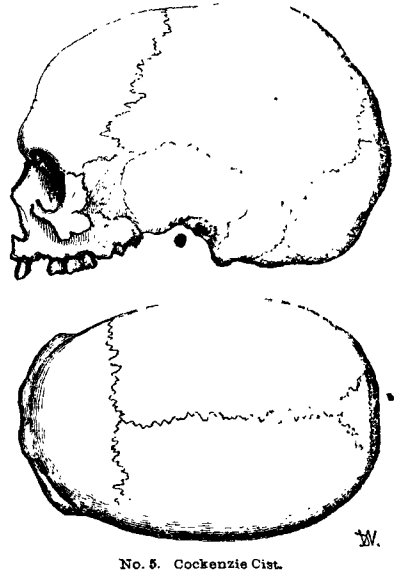
The full value of such investigations, and even their precise bearing and the conclusions legitimately deducible from them, may probably be matter of dispute, but there can be no question that a general distinctive cranial conformation is clearly discoverable in modern nations, and is even very markedly observable between the different races of the British Isles. Given a sufficient number of examples of each class, the experienced eye would at once discriminate between the modern European Fin, Germanic Teuton, and British Celt. The conclusion appears therefore inevitable, that if we find in the ancient tumuli like variations in physical form, systematically reducible to two or more classes, we are justified in assuming the existence of diverse primitive races, and of seeking in the accompanying relics for indications of their peculiar arts and customs, as well as of their relative positions as contemporary or successive occupants of the country.

[1] In taking these measurements I have been efficiently assisted by Mr. John Zaglas, anatomical assistant to Professor Goodsir of Edinburgh University, and by Dr. John Alexander Smith. Nearly all of the measurements have been repeated several times, and may therefore be received as accurate.

No.		CRANIA.	Longitudinal Diameter.	Parietal Diameter.	Frontal Diameter.	Vertical Diameter.	Inter-Mastoid Arch.	* Inter-Mastoid Arch, from Upper Root of Zygomatic Process.	Inter-Mastoid Line.	* Do. from Upper Root of Zygomatic Process.	Occipito-frontal Arch.	* Do. from Occipital Protuberance to Root of Nose.	Horizontal Periphery.	* Relative Capacity.
	i.	Mexican,	6.8	5.5	4.6	6.	15.6	...	4.4	...	14.6	...	19.9	32.5
	ii.	„	6.4	5.7	4.5	5.4	14.6	...	4.5	...	13.5	...	20.2	31.10
Primitive Dolicho-kephalic, or Kumbe-kephalic.	1.	Cist, Aberdeenshire,	7.	5.4½ ?	4.9 ?	4.10	13.11	11.5	3.6½	4.8½	13.9	12.	20.4	32.2
	2.	„ Fifeshire,	7.	4.8	4.4	5.3	13.2	11.	4.1	4.10	14.	11.11	19.6 *	31.9
	3.	„ Cockenzie, East-Lothian,	6.11	5 3	3.11	5.	...	12.	...	4.8½	14.4	11.4	19.	30.11
	4.	„ „	7.	4.11	4.4	5.3	13.8	11.4½	4.1	4.10	13.10	11.3	16.7½	28.10½
	5.	„ „	6.6	4.1 ?	4.11	4.2 ?	13.2	11.3	...	4.8 ?	13.11	12.	19.	29.6
	6.	„ Stonelaws, East-Lothian,	7.3	5.4	4.6	5.2	14.3	11.9	4.4	5.0½	14.8	12.3	20.8½	33.1½
	7.	Cairn, Fifeshire,	7.5	5.2	4.5	5.2	14.3	12.	3.7	4.10½	14.3	12.3	20.7½	33.2½
	8.	Tumulus, Newbattle,	7.9	5.6	4.9	...	...	12.3	...	5.6	15.6	...	21.3	...
	9.	„ Montrose,	7.3	5.8	4.3½	4.9	14.	11.9	3.8½	5.	14.2	11.9	20.7	32.7
Brachy-kephalic.	10.	Cist, Montrose,	7.	6.1	5.3	5.8	15.9	13.1	4.4	5.9½	15.2	13.3	21.	33.8
	11.	Moss, Kilsyth,	...	5.7½ ?	4.4	5.5	14.6 ?	12.2 ?	4.1	...	...	...	21. ?	...
	12.	„ Linton,	6.6	5.1	4.1	4.9	13.5	11.3	3.9	4.6	13.6	11.9	18.7½	29.10½
	13.	„ „	6.7	5.	4.1	4.11	13.4	11.3	3.10	4.6	13.8	11.10	19.7	31.1
	14.	Cist, Ratho,	6.10	6.	5.1	5.6	15.7	12.11	4.2	5.7	14.11	13.	20.	32.4
	15.	„ Linlithgow,	7.2 ?	5.6	4.9	...	14.10	12.7	4.6	5.5	...	...	20.6	...
	16.	Roman Shaft, Roxburghshire,	7.3	5.4	4.6	5.4	14.7½	12.	5.3½	5.6	14.4	12.9	20.6	33.1
Celtic.	17.	Tarbert, Kintyre,	7.9	5.	4.10	5.6	14.9	11.11	4.	5.4	15.5	13.6	21.3	34.6
	18.	Sea-Shore, Argyleshire,	7.6	5.1	4.6	5.1	14.8	11.3	3.11	5.3	14.6	12.11	20.4	32.11½
	19.	Harris, Hebrides,	7.3	5.3	4.5	5.4½	14.5	12.4	3.11½	4.9	14.9	12.9	20.10	33.5½
	20.	Iona, „	7.5	5.6½	5.0½	5.6	14.11½	12.3	4.	...	14.9	12.6	20.10	33.9
	21.	„ „	7.3	5.6½	4.4	5.6	14.8	12.	4.1	5.3	14.5	12.10	20.2	32.11
	22.	„ „	7.2	5.7	4.5	5.6	14.9	11.10	4.3	5.6	14.4	12.6	20.	32.8
	23.	„ „	7.3½	5.7	4.6	5.2	15. ?	12.4 ?	...	...	14.8	12.6½	19.10½	32.4
	24.	„ „	7.2	5.5	4.6	...	...	...	...	...	...	12.10	20.7	...
	25.	Knockstanger, Caithness,	7.8	5.6	4.3½	5.3	14.4	11.8	4.7	5.6	14.6	12.7	20.11	33.10
	26.	Inch Columb Kill, Ireland,	7.9	5.7	5.3	5.6	15.7	13.3	4.0½	5.4	16.4	14.4	21.11	35.2
	27.	Celtic Type (!) Edin. Phrenol. Museum,	7.11	5.5	4.9	...	...	12.	...	5.1	15.5	13.9	21.6	...
Mallenal.	28.	Tumular Cemetery, North Berwick,	7.6½	5.9	4.7	5.6	15.2	12.3	3.11	5.2	15.	12.3	21.5	34.5½
	29.	„ „	7.	5.7	4.0½	4.8	13.8	11.4	3.6	4.9	...	12.3	19.9	31.5
	30.	„ „	7.3½	5.10	4.11	5.7	15.5	12.3	...	5.9	15.	13.	21.7	34.5½
	31.	Castle Bank, Edinburgh,	7.6	5.4	4.11	...	14.3	12.	4.3	5.5	...	12.6	20.1	...
	32.	Flodden Wall, Edinburgh,	7.6	5.4	4.8	5.2	14.6	12.2	4.2	5.1	15.6	...	20.11	33.7
	33.	Old St. Giles's, Edinburgh,	7.3	5.6	4.4	5.1	14.	11.9	4.2½	5.5	14.4	12.	20.2½	32.6½
	34.	„ „	7.6	5.6	4.7	...	14.7	12.	4.1½	5.1	15.	12.10	20.8	...
	35.	„ „	6.11½	5.6	4.4	5.	14.5	12.	3.7½	4.9	14.	11.9	19.10	31.9½
	36.	„ „	6.6	5.3	4.2	4.11	13.3	11.3	3.10½	4.10	13.3	11.	18.7	30.
	37.	„ „	6.11	5.9	4.9	5.1	15.2	12.	4.	5.7	14.	12.2	20.5	32.5
	38.	„ „	7.3	5.7	4.6	5.4	14.7	12.1	4.	5.	14.7	12.7	20.2	32.9
	39.	Constitution Street, Leith,	7.	5.5	4.9	5.3	14.6	12.5	4.10½	5.9½	14.3	12.5	20.3	32.6

There is no primitive race known to us which seems so fit to be selected as a type and standard of comparison in relation to cranial development, as the Aztecs or ancient Mexicans. They were the last dominant race among numerous native tribes, who, progressing from the rudimentary Stone Period, were excluded from influences such as those which in Europe superseded the ages of stone and bronze by the more perfect arts of civilisation. These changes archæologists are now agreed in associating with the introduction of iron. But if in this latter point also the parallel be admissible, then we must less conceive of the more perfect arts of civilisation being superinduced on those of the Archaic Period, than of the Allophylian nations being themselves superseded. More extended observations on the physical characteristics of these races will probably, to a great extent, determine this. Two skulls selected from Morton's Crania Americana are placed at the head of the table, and will afford a very satisfactory comparative estimate of the cranial capacity of the races of the Scottish tumuli. No. i. is figured in *Plate* XVII. of Dr. Morton's valuable work, from which it will be seen that it decidedly belongs to the Brachy-kephalic class of Retzius, which again nearly corresponds with the pyramidal division of Dr. Prichard. It is thus described by Dr. Morton:—"With a better forehead than is usual, this skull presents all the prominent characters of the American race—the prominent face, elevated vertex, vertical occiput, and the great swell from the temporal bones upward." No. ii. is figured in *Plate* XVIII. of the same work, and closely corresponds to it in type. It is described as "a remarkably well characterized Toltecan head from an ancient tomb near the city of Mexico, whence it was exhumed, with a great variety of antiques, vessels, masks, ornaments," &c. These, therefore, afford a fair comparative criterion of the capacity of the tumuli builders of Britain for the practice of arts analogous to those in which the later American races so greatly excelled at the epoch of the Spanish Conquest; and it will be seen that the comparison is, upon the whole, in favour of the superior intelligence of the British Brachy-kephalic race, as indicated by the cerebral mass and frontal development. No. 1 is an exceedingly interesting example of a skull of the Stone Period, in the Antiquarian Museum. It was found in 1822 in a rude cist in the parish of Banchory-Devenich, Aberdeenshire. On the top of the head is a hole nearly circular, rather more than an inch in diameter, which there can scarcely be a doubt was caused by the death-blow.

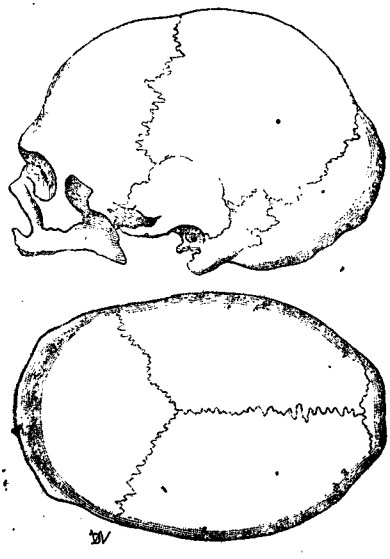
In each corner of the cist lay a small pile of flint flakes.—No. 2 was taken from one of thirty cists found near Fifeness, in 1826, and described in a previous chapter.—Nos. 3, 4, and 5 were obtained from a group of rude cists discovered in the neighbourhood of Cockenzie, East-Lothian, in 1840. Nos. 3 and 4, as well as the two previous examples, are in the Museum of the Scottish Antiquaries. No. 5 has been obtained from J. M. Mitchell, Esq., who was present when the graves at Cockenzie were opened, and is here figured as a characteristic example of the class. No relics were found along with these remains, but the cists were of the primitive circumscribed dimensions, and presented the rudest characteristics of early sepulture.—No. 6 is a skull in the Edinburgh Phrenological Museum, found on the farm of Stonelaws, East-Lothian, where a number of rude primitive cists have been exposed in the course of agricultural operations. Some of these lie east and west, with the heads at the west end, according to Christian practice, but others are irregularly laid; and the example here noted was found with the head at the east end of the grave.—No. 7 was obtained from a cist discovered under a large cairn at Nether Urquhart, Fifeshire, in 1835. An account of the opening of several cairns and tumuli in the same district is given by Lieutenant-Colonel Miller, in his "Inquiry respecting the Site of the Battle of Mons Grampius."[1] Some of them contained urns and burnt bones, ornaments of jet and shale, and the like early relics, while in others were found implements or weapons of iron. It is selected here as another example of the same class of crania.—No. 8 was found in a cist under a tumulus opened at Newbattle, East-Lothian, in 1782. This, there can be little doubt, was the large encircled tumulus in the immediate vicinity of the Abbey, which was found to cover a cist nearly seven feet long. The cranium



No. 5. Cockenzie Cist.

[1] Archæol. Scot. vol. iv. pp. 43, 44.

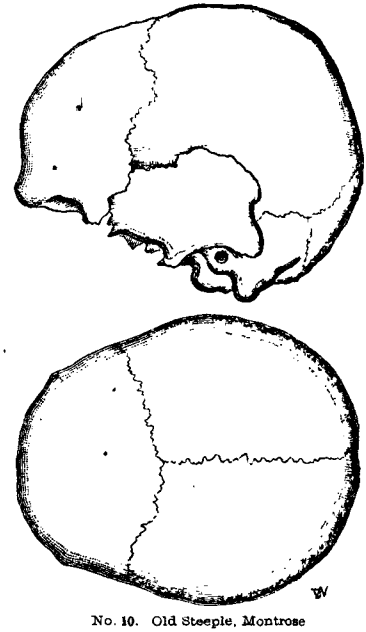
is well proportioned and of unusually large dimensions, and probably pertained to a chief of gigantic stature.—No. 9 is from a tumulus at Montrose. The whole of these, more or less, nearly agree with the lengthened oval form described by Professor Nillson as the second race of the Scandinavian tumuli. They have mostly a singularly narrow and elongated occiput; and with their comparatively low and narrow forehead, might not inaptly be described by the familiar term *boat-shaped*. It is probable that further investigation will establish this as the type of a primitive, if not of the primeval native race. Though they approach in form to a superior type, falling under the first or Dolicho-kephalic class of Professor Retzius' arrangement, their capacity is generally small, and their development, for the most part, poor; so that there is nothing in their cranial characteristics inconsistent with such evidence as seems to assign to them the rude arts and extremely limited knowledge of the British Stone Period.



No. 7. Nether Urquhart Cairn.

No. 10 is an exceedingly characteristic example of an entirely different type of cranium. It was obtained under very remarkable circumstances, more particularly detailed in a subsequent chapter. On the demolition, in 1833, of the old Town Steeple of Montrose, a building of great antiquity, it was found that at some depth beneath its ancient foundations there lay the sepulchres of a much more remote period. Mr. William Smith of Montrose, remarks in a communication sent to the Society of Antiquaries of Scotland in 1834, along with the donation of an urn:—"The accompanying urn or vase is one of four of the same description found about the beginning of April 1833 below the foundation of the Old Steeple in Montrose, beside the skeleton of a human body,—two of them being at each side of the head, and two near the feet. . . . Exactly below the foundations of the Old Steeple the skeleton was discovered, with the vases

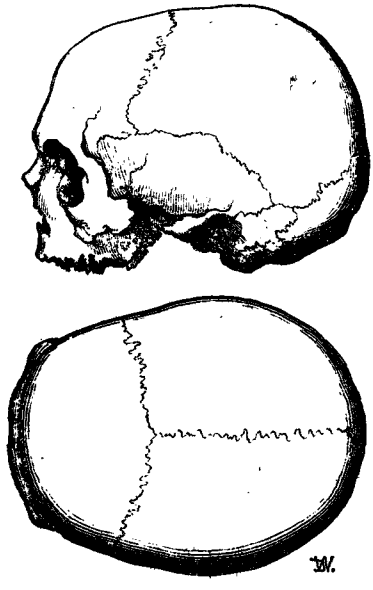
disposed about it as mentioned. It measured six feet in length. The thigh bones, which were very stout, and the teeth, were the only parts in good preservation. The skull was a little wasted, and was given to the Rev. Mr. Liddell, of Lady Glenorchy's Chapel, who intended to present it to Mr. Combe of the Phrenological Society."[1] The skull, of which the measurements are given in No. 10, is the same here referred to, presented to the Phrenological Museum by the Rev. Mr. Liddell. It is a very striking example of the British Brachy-kephalic type; square and compact in form, broad and short, but well balanced, and with a good frontal development. It no doubt pertained to some primitive chief, or arch-priest, sage, it may be, in council, and brave in war. The site of his place of sepulture has obviously been chosen for the same reasons which led to its selection at a later period for the erection of the belfry and beacon-tower of the old burgh. It is the most elevated spot in the neighbourhood, and here his cist had been laid, and the memorial mound piled over it, which doubtless remained untouched so long as his memory was cherished in the traditions of his people.—No. 11 was found in a moss near Kilsyth, Stirlingshire. It is nearly black, and quite firm and sound, from the action of the peat. Its general characteristics clearly belong to this second group, but it has been injured in parts, and apparently subjected to great pressure, so as to render some of the measurements doubtful.—Nos. 12 and 13 are skulls found at different times, at a considerable depth, in a moss at Linton, Peeblesshire.—No. 14 is a very characteristic example of the Brachy-kephalic type of cranium. It was found in a cist under a tumulus in the parish of Ratho, Mid-Lothian, and alongside of the skeleton stood a small rude clay urn, within which lay several bronze



No. 10. Old Steeple, Montrose

[1] MSS. Library S. A. Scot. Nov. 28, 1834.

rings.—No. 15 is also a good example of the same type. It was obtained, in 1849, from a cist partly hollowed out of the natural trap rock on the farm of East Broadlaw, in the parish and county of Linlithgow. It was covered with two unhewn slabs of stone, and measured internally about six feet long. The skeleton was in good preservation, and lay at full length. Only a few inches of soil covered the slabs with which it was inclosed. No relics were found in the cist, but some time prior to its discovery a bronze celt and spear-head were turned up in its immediate vicinity.

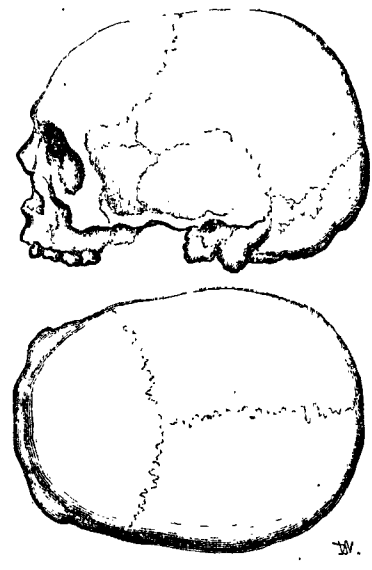


No. 15. Linlithgow Cist.

Few as these examples are, they will probably be found, on further investigation, to belong to a race entirely distinct from those previously described. They correspond very nearly to the Brachy-kephalic crania of the supposed primeval race of Scandinavia, described by Professor Nillson as short, with prominent parietal tubers, and broad and flattened occiput. In frontal development, however, they are decidedly superior to the previous class of crania, and such evidence as we possess seems to point to a very different succession of races to that which Scandinavian ethnologists now recognise in the primitive history of the north of Europe. Our data are as yet too few to admit of our doing more than noticing these indications of the evidence that has been produced, in the hope that it may stimulate to the further prosecution of this interesting branch of primitive ethnology.

No. 16 is a cranium chiefly interesting from the circumstances under which it was found. During the construction of the Edinburgh and Hawick Railway, in 1846, extensive Roman remains were brought to light in the vicinity of the village of Newstead, Roxburghshire. These are described in a subsequent chapter. In the progress of the work the excavators exposed a group of circular shafts, or well-like pits, varying from three feet to about twenty feet in depth.

They were filled with black fetid earth, intermixed with bones of animals, Roman pottery, mortaria, amphoræ, Samian ware, &c., whole and in fragments. In one of these shafts was found the entire skeleton of a man, standing upright, with a long iron spear at his side, and various specimens of Roman pottery in the debris with which the pit was filled.[1] Of the period, therefore, to which the cranium belongs, there can be no doubt, though no sufficient evidence exists to determine whether it pertained to a Roman legionary, or a contemporary native Briton. The latter is, perhaps, more probable. The skull is of moderate size, but exceedingly well proportioned, the teeth are in perfect preservation, with the crowns very little worn, and the markings of all the muscles are unusually strong and well defined.



No. 16. Roman Shaft, Newstead.

The succeeding group of crania, Nos. 17-27, afford a fair average criterion of the Celtic type.—No. 17 is a skull dug up in a cave on the sea-coast, at the Mull of Kintyre, Argyleshire, near to where tradition affirms a battle to have been fought between the natives and an invading host of Northmen.—No. 18 is in like manner a memorial of Scandinavian aggression, and is marked in the catalogue of the Phrenological Museum as the skull of a Dane. It was dug out of the sand on the sea-beach, near Larnahinden, Argyleshire, where a party of Danes are believed to have landed and been defeated. It exhibits some remarkable measurements, especially in the small proportion of the vertical diameter; and a comparison of its various dimensions with those of the Roman skull, No. 16, brings out very distinctly the points of disagreement of two essentially different forms of crania. No. 18, however, is not to be accepted as a good Celtic type. The best medium form of the Celtic cranium is No. 20, which appears, in

[1] Two mortaria, obtained from this shaft, along with the iron spear-head, are now in the possession of John Miller, Esq. of Millfield, C.E. The spear-head will be found figured in a later chapter. The skull is now in the possession of John Alexander Smith, M.D., but it is his intention to deposit it in the Museum of the Scottish Antiquaries.

so far as the present amount of observation admits of such conclusions, to be a fair standard of this important class of crania. It forms one of a very interesting group of skulls in the Phrenological Museum. No. 19 was brought from Harray, near Lewis, and Nos. 20-24 from Iona. The whole of these were presented to the Society, in 1833, by Mr. Donald Gregory, Secretary of the Society of Antiquaries of Scotland, and they are each marked by him as the "Skull of a Druid from the Hebrides." They were no doubt obtained during the operations carried on by the members of the Iona Club, thus described in the introduction to the Collectanea de Rebus Albanicis:—

"In order to celebrate the institution of the Club, a meeting was held in the island of Iona, upon the 7th day of September 1833, permission having been obtained from His Grace the Duke of Argyle, the President, to make such excavations in the island as the Club might deem necessary. A search was made in the ancient cemetery called *Relig Oran*, for such tomb-stones as might in the process of time have been concealed by the accumulation of rubbish. The result of these operations was, that a considerable number of finely carved tomb-stones was brought to view, which none of the inhabitants had ever seen before."

The sepulchres of the Scottish kings were also explored, which were used for the last time as a royal cemetery when Macbeth was interred there beside his Queen Gruoch, the daughter of Bodhe,—as a record in the St. Andrew's Chartulary informs us was the unromantic name of Lady Macbeth.[1] Mr. Donald Gregory was secretary of the Iona Club, and one of the ablest Celtic scholars of his day. The designation which he affixed to the crania brought from Iona may be accepted as undoubted evidence of their having been found under circumstances which afforded proof of their high antiquity; though it is not necessary to assume from this that they had pertained to Druids. Most probably nothing more was intended by the epithet which Mr. Gregory applied to them, than to indicate, in the briefest manner, that he believed them to have belonged to the native population prior to the introduction of Christianity in the sixth century, when Columba landed at *Innis nan Druidheanach*, or the Isle of the Druids, as Iona is still occasionally styled by the native Highlander. The crania thus brought from the venerable centre of Celtic civilisation may not unreasonably be looked upon as furnishing characteristic types of the oldest historical race of the north of Europe.—No. 25 is also

[1] Regist. Prior. S. Andree, p. 114. Lulach the Foolish is mentioned by Scottish chroniclers as reigning after Macbeth for four months, when he also was slain, and interred at Iona.—Annals of the Scots, A.D. 1058.

a good Celtic cranium, though less true to the type than No. 20, from its excess in longitudinal diameter. It was dug up at Knockstanger, Caithness, at a spot where a number of the Clan Mackay were interred, after being defeated in a battle fought with the Sinclairs in 1437. To these have been added No. 26, a skull in the Phrenological Museum, brought from an ancient cemetery at Inchmore, or Columb Kill, county of Longford, Ireland; and No. 27, a cast of a skull in the Phrenological Museum, marked as the Celtic type, and described as one of a series of skulls "selected from a number of the same tribe or nation, so as to present, as nearly as possible, a type of the whole in the Society's collection."[1] It is characterized in the printed catalogue as a "Long Celtic Skull," but would not, I think, be accepted by ethnologists as at all typical of the true Celtic cranium. It falls decidedly under the class designated by Professor Retzius as Dolicho-kephalæ, and is introduced in the table of measurements chiefly as furnishing useful elements of comparison. Contrasted with No. 20, it will be seen that it is 7.11 to 7.5, exceeding the latter in longitudinal diameter by $\frac{6}{12}$, or half an inch, while in parietal diameter it falls short of it by $\frac{5}{24}$. The difference is equally in favour of the true Celtic cranium, No. 20, in other measurements of breadth, including the frontal diameter and the inter-mastoid arch. This mode of comparison is still more remarkable and characteristic when the same skull, No. 27, is placed alongside of No. 10, a good example of the Brachy-kephalic class, the excess in the one set of measurements being fully balanced by a corresponding diminution in the others. The proportions of these Scottish Celtic crania entirely agree with the assumed type already referred to, as recognised by the ablest ethnologists. Professors Nillson and Retzius, and Dr. Thurnam, all concur in describing the type of the old Celtic cranium as intermediate to the true Dolicho-kephalic and Brachy-kephalic forms. Dr. Norton Shaw also recognises the same characteristic proportions, and refers in evidence to a skull in the museum of Dr. Buckland, which was found in a tin mine in Cornwall at a depth of 500 feet.[2]

Returning to the table of measurements.—No. 28 is a skull in the Museum of the Scottish Antiquaries. It was found in what appears to have been an ancient tumular cemetery, at North-Berwick, East-Lothian, from whence also a specimen of early medieval pottery,

[1] Phrenological Journal, vol. vi. p. 144.

[2] Report of British Association for Advancement of Science. Seventeenth Session, 1848. P. 32.

figured in a later chapter, was procured. Many ancient relics have been obtained at the same place, including a circular silver fibula, apparently of the Anglo-Saxon era. A large surrounding area appears to have been used as a burial ground, probably for many centuries, as the encroachments of the sea frequently expose human bones, and the skeletons may be occasionally discerned in the newly exposed strata, after an unusually high tide.—Nos. 29 and 30 are crania in the Phrenological Museum from the same locality. Of these No. 29 is a markedly inferior example of cranial development. While all the measurements are small, the frontal diameter is inferior to that of No. 12, the smallest of all the Brachy-kephalic examples, which it exceeds in longitudinal diameter by half an inch. So extremely poor is the frontal development of this skull, that its diameter at the zygomatic processes is barely 3.5½. It is only introduced here in order to afford a series of examples selected without any reference to theory.

The remaining skulls with which these are classed may be regarded as a fair series of examples of medieval Scottish crania.—No. 31 was

Tower in the Vennel, Edinburgh.

found in 1828, in a deep cutting about midway up the south side of the rock on which Edinburgh Castle stands, during the construction of a new approach to the old town. Beside it were several large boars' tusks, and an iron weapon greatly corroded.—No. 32 was obtained in

1829, in digging the foundations of a school built in the Vennel of Edinburgh, on the site of part of the town wall, erected immediately after the disastrous battle of Flodden in 1513. The woodcut represents the ancient tower, which still remains, almost the last remnant of the civic fortifications reared at that memorable crisis in Scottish history, and the relic which is here associated with these venerable defences is not without features appropriate to the stern memorials of that epoch. The skull has a deep gash, apparently from the blow of a sword or axe, and pertained, we may presume, to some old civic warder of the Scottish capital, slain at his post on the city wall.—Nos. 33-38 were all discovered in the course of excavations made to the south of the old Parliament House at Edinburgh in 1844, for the purpose of building new court-houses, when several ancient oak coffins and other early relics were brought to light.[1] They lay alongside of the earliest city wall, built by James III. in 1450, and within the Nether Kirkyard of St. Giles', which appears to have fallen into disuse in the reign of Queen Mary. To these are added No. 39, a skull found in digging a drain in Constitution Street, Leith, probably within the ancient limits of St. Mary's Church-yard, which was bounded on that side by the ancient town wall, razed to the ground immediately after the siege of Leith in 1560. These crania, it should be added, are apparently all males, with the exception of No. 4, and perhaps also No. 36.

Such are the elements from which it has been attempted to deduce some conclusions of general import in regard to the successive primitive races that have occupied Scotland prior to the era of authentic historic records. The data are much too few to justify the dogmatic assertion of any general inferences, or to admit of positive answers to the questions naturally suggested by the conclusions arrived at by Nillson and Eschricht in relation to the races of Scandinavia. They include, however, all the examples that could be obtained, and are in so far valuable as trustworthy examples of the cranial characteristics of Scottish races, that they have been selected from various localities, by different individuals, with no single purpose in view. It is difficult, however, even after obtaining the proper crania, to determine the most trustworthy elements of relative proportion. Dr. Walter Adam, who had the advantage of studying under both Dr. Barclay and Mr. Abernethy, carried out an extensive series of measurements of crania,

[1] Memorials of Edinburgh in the Olden Time, vol. ii. p. 110.

chiefly from examples found in the catacombs of Paris, and preserved in the University Museum there. These I now possess, through the kindness of Dr. Adam, and he remarks in writing to me on the subject:—"So far as appeared, precision could only be obtained by referring every dimension to the compression of the zigoma; the measurement being seven-eighths of what I consider the normal transverse of at least the Caucasian cranium; that is, of half the length of the head—the long-admitted statuary scale." Owing to the imperfect state of the zigomata in the great majority of skulls from the tumuli, this measurement is unfortunately rarely attainable. Next in importance, however, is one of the additional ones in the table, marked as the inter-mastoid line, from the upper root of the zygomatic process. The relative proportions of this and of the parietal diameter, when compared with the longitudinal diameter, afford the most characteristic elements of comparison between the different types. Another interesting element of comparison appears to consist in the relative proportions of the parietal and vertical diameters. So far as appears from the table of measurements, the following laws would seem to be indicated:—In the primitive or elongated dolicho-kephalic type—for which the distinctive title of kumbe-kephalic is here suggested—the parietal diameter is remarkably small, being frequently exceeded by the vertical diameter; in the second or brachy-kephalic class, the parietal diameter is the greater of the two; in the Celtic crania they are nearly equal; and in the medieval or true dolicho-kephalic heads, the parietal diameter is again found decidedly in excess; while the preponderance or deficiency of the longitudinal in its relative proportion to the other diameters, furnishes the most characteristic features referred to in the classification of the kumbe-kephalic, brachy-kephalic, Celtic, and dolicho-kephalic types. Not the least interesting indications which these results afford, both to the ethnologist and the archæologist, are the evidences of native primitive races in Scotland prior to the intrusion of the Celtæ; and also the probability of these races having succeeded each other in a different order from the primitive colonists of Scandinavia. Of the former fact, viz., the existence of primitive races prior to the Celtæ, I think no doubt can now be entertained. Of the order of their succession, and their exact share in the changes and progressive development of the native arts which the archæologist detects, we still stand in need of further proof; and the assumed primeval position of the kumbe-kephalic

race of Scotland is advanced here only interrogatively, and with the view of inducing others to take up the same interesting inquiry. The subject demands much more extended observation before any such conclusion can be dogmatically affirmed concerning the primitive Scottish races. We have also still to obtain the proofs of that abrupt change from the one form to the other, only to be procured as the result of numerous independent observations, but which can alone satisfactorily establish the fact of the intrusion of new races. The same evidence may also be expected to show whether the primitive race was entirely superseded by later colonists. If the Allophylian aborigines were not exterminated, but were admitted to share in the superior arts of their conquerors, some proof may yet be recoverable of the gradual progression in physical conformation as they abandoned the nomadic and wild hunter state for a pastoral life, so that they were not finally extirpated, but interfused into the mixed race which now occupies the country, as we know was to some extent the case, at a later period, with its Celtic population.

Not only in the annual operations of the agriculturist, but also in the deliberate researches of the archæologist, hundreds of tumular crania have been disinterred. Of these, however, scarcely any note has been taken, nor can we hope to obtain sufficient data for the determination of the interesting questions involved in the investigation till its importance is more generally recognised. A few facts, however, have been noted from time to time, some of which, in the absence of more precise observations, may help to throw light on the physical characteristics of the primitive British races. With this view, therefore, the following additional notices are selected.

In 1825 one of the singular northern circular forts usually styled burghs, situated at Burghar, in the parish of Evie, Orkney, was explored by the son of the resident clergyman, when there was found within the area a human skeleton, a rude bone comb of most primitive fashion, and part of a deer's horn. The comb, which is now preserved in the Museum of the Scottish Antiquaries, is figured in another chapter; it measures four inches in length, and could not readily be surpassed in the rudeness of its construction or attempts at ornament. Along with this curious relic, the skull was forwarded to Edinburgh by Alexander Peterkin, Esq., but it is described in his communication as then in fragments, and has not been preserved. Mr. Peterkin remarks of it,—"Although the upper part of the skull be

separated into two parts, you will observe on joining them together that it is of a very singular conformation. The extreme lowness of the forehead and length backward, present a peculiarity which may be interesting to phrenologists."[1] This, therefore, would appear to have belonged to the primitive Kumbekephalæ.

Other observations on the physical characteristics of the remains found in primitive Scottish sepulchres are much less definite. Alexander Thomson, Esq. of Banchory, remarks in a communication to the Society of Antiquaries of Scotland, describing two urns found in a cist on his estate in Aberdeenshire:—"The skeleton was far from entire, but there were fragments of every part of it found. The teeth are perfectly fresh, and from the appearance of the jaws, the skeleton must be that of a full-grown person, though of small size. I was told that the skeleton lay quite regular when first found."[2] It may be presumed that in this case, as in other examples of the physical conformation of the primitive race, the smallness of the head was not a precise criterion of the dimensions of the skeleton. Another correspondent describes a cist discovered by the plough on the farm of Farrochie, in the parish of Feteress, Kincardineshire, within which was found a small urn and upwards of one hundred beads of polished black shale:—

"The interior of the tomb measured three feet in length, two feet in breadth, and twenty inches in depth. The top, sides, and ends were each formed of one stone, and at each corner the end of a flat-stone, set on its edge, was introduced angularly between the stones of the sides and ends. The slab that formed the cover of the tomb measured three feet eight inches in length, by three feet two inches in breadth. The body had been laid upon its right side, with the face towards the south. The limbs had been bent upwards, and it was observed when the tomb was opened that one of the leg bones had been broken near the middle. The length of the leg bones was eighteen inches, and that of the thigh bones twenty inches, with very strong joints. The skull appeared to be small in proportion to the other parts of the body. In both jaws the teeth were complete and in beautiful preservation. The ribs and other small bones crumbled into dust soon after they were exposed to the air. The urn was lying in the tomb as if it had been folded in the arms of the corpse."[3]

Dr. Prichard remarks in reply to the question,—Was there anything peculiar in the conformation of the head in the British or Gaulish races? "There are probably in existence sufficient means for deciding this inquiry in the skulls found in old British cairns or places of sepulture. I have seen about half a dozen skulls found in different parts of England, in situations which rendered it highly probable

[1] Archæol. Scotica, vol. iii. p. 44.

[2] MSS. Letter, Libr. Soc. Antiq. Scot., December 8, 1817.

[3] MSS. Letter, Mr. William Duncan, 13th December 1838.

that they belonged to ancient Britons. All these partook of one striking characteristic, viz., a remarkable narrowness of the forehead compared with the occiput, giving a very small space to the anterior lobes of the brain, and allowing room for a large development of the posterior lobes. There are some modern English and Welsh heads to be seen of a similar form, but they are not numerous."[1]

The crania already noticed from the Scottish tumuli, it is obvious, include two greatly differing types, one of which, at least, cannot with strict propriety be described as either remarkably narrow or very small in the forehead, when compared with the occiput. The description of Dr. Prichard will, however, be frequently found applicable to those of the brachy-kephalic type, examples of which, it may be presumed, have fallen under his notice. The peculiar characteristic of the primeval Scottish type appears rather to be a narrow prolongation of the occiput in the region of the cerebellum, suggesting the term already applied to them of *boat-shaped,* and for which the name of *Kumbekephalæ* may perhaps be conveniently employed to distinguish them from the higher type with which they are otherwise apt to be confounded. Dr. Thurnam remarks,—"The few crania which I have myself seen from early British tumuli, correspond very much with Dr. Prichard's description. They had, for the most part, a shortened oval form; ample behind, and somewhat narrow and receding in the forehead. The cranium from the undoubtedly British tumulus at Gristhorpe, near Scarborough, has this general form; it is, however, unusually large, and not deficient in frontal development; its form, too, is in some respects fine, particularly as regards the full *supra-orbital* region, and the high and fully developed middle head."[2] The Rev. Abner W. Brown, vicar of Pitchley, Northamptonshire, furnished to the Archæological Association in 1846 an interesting account of some British Kistvaens found there under very remarkable circumstances. The name of the locality is spelt in Doomsday-book *Pihtes-lea* and *Picts-lei,* terms sufficiently suggestive of the Celtic Picts or Ffichti of the north. "The skeleton which we have endeavoured to preserve," the writer remarks, "is that of a muscular well-proportioned young man, probably five feet nine inches high. The teeth are fine; the wisdom teeth scarcely developed. The facial line in some of the skulls appeared to be very fine. This skull exhibits the peculiar lengthy form, the prominent and high

[1] History of Mankind, vol. ii. p. 92.

[2] Description of tumular cemetery at Lamel Hill, Archæological Journal, vol. vi. p. 129.

cheek-bones, and the remarkable narrowness of forehead which characterize the Celtic races, and distinguish theirs from the rounder, broader skulls, and more upright facial line, of the Teutonic tribes."[1] It is obvious, however, from the above description, that the ancient crania of Pihtes-lea differ greatly from the true Celtic type, and correspond rather to the Kumbekephalæ. The whole circumstances attendant on their discovery indicate their belonging to a very remote era. The venerable church of Pitchley, an edifice still retaining original work of the beginning of the twelfth century, having begun to exhibit alarming symptoms of decrepitude, was carefully repaired and restored, even to the foundations. In reconstructing one of the principal pillars, the startling fact was brought to light, that the Norman builders had laid the foundation of the pillar in ignorance of a rude hollow cist lying directly underneath, with only about a foot of soil between. Other portions of the edifice were discovered to have been, in like manner, unconsciously founded above the graves of an elder race, and it at length became apparent that the ancient church-yard was entirely superimposed on a still older cemetery. "Below the foundation, though above the level of the kistvaens, there were common graves; in one of them was the skeleton of a beheaded person lying at full length, the head placed upon the breast, one of the neck-bones having apparently been divided." Pitchley Church belonged, even before the Conquest, to the Abbey of Peterborough. It was probably one of the earliest English sites of a Christian church; yet the British or Saxon graves of the upper tier, made in ignorance of the older cists below, had become sufficiently consolidated at the date of the Norman foundation to admit of the building of a solid and durable fabric above them. The cists lay nearly east and west, the bodies at full length, lying on their right sides, with the faces looking to the south, and the arms crossed in a peculiar way—the right arm across the breast, with its hand touching the left shoulder, and the left arm straight across, so that its hand touched the right elbow.[2] Both Norman and Roman coins were found near the surface;

[1] Archæological Journal, vol. iii. p. 113.

[2] Minute details, such as are given in the text, of the disposition of the arms and hands, are always open to some doubt. Unless where the cist is filled with earth, the bones must necessarily fall from their original position on the decay of the enveloping tissues; and when so filled, the earth has generally percolated into it long subsequent to the interment. Those who have frequently opened barrows must be well aware how difficult it is to ascertain with any certainty much more than the general relative position of the bones and skull.

deeper down lay fragments of coarse unglazed British and also of Roman pottery, and close to, or within one of the cists, a rude oblong amethyst, about an inch long, perforated lengthwise. In another were small pieces of charcoal, and a fragment of British pottery; and in a third an unusually large tusk of a wild boar. Mr. Brown, conceiving the position of the bodies to prove the introduction of Christian sepulchral rites, supposes these cists to have belonged to the Christians of Romanized Britain, before the Saxon invasion. It seems more probable that they pertain to that far older era which preceded the singular Pagan rites accompanying the circumscribed cist. The cranial characteristics appear to confirm this idea, and it is only on such a supposition that we can conceive of the establishment of the graveyard upon the site, in entire ignorance of the primeval cemetery buried beneath the accumulated debris of later generations. Another skeleton, found near Maidstone, in a circumscribed cist of peculiar construction, and undoubtedly of Pagan origin, is thus described by the Rev. Beal Post:—"The state of the skull, from the sutures being much obliterated, shewed the individual to have been about seventy years of age; the form of the skull also shewed that he did not belong to the present race which possess the island, but to the Celtic division of the European family. It was very narrow in the front part, and low in the forehead, exhibiting but little development of the intellectual faculties, while the organs of self-preservation, and other inferior organs in the hinder parts of the skull, were strongly developed. The bones seem to be those of a person about five feet seven inches high, the thigh-bone being seventeen inches long, and the other bones in proportion. The teeth, apparently, had been every one in a sound state. None of those found were in a state of decay, even incipiently so."[1] In both of these interesting examples it is obvious that the term Celtic is loosely applied in contradistinction to Saxon or Teutonic, and in accordance with the pre-conceived idea that the Celtæ are the primeval colonists of Britain. The forms of these crania appear clearly to lead to a different conclusion. Such are some of the observations heretofore made on the physical characteristics of the primitive Briton. Scanty as they are, they possess considerable value to us in the attempt to recover the lost chapters of his history. Imperfect as the development of the intellectual faculties appear to have been, there is sufficient evidence to justify the con-

[1] Jour. of Archæol. Association, vol. iv. p. 65.

clusion, that the races of the tumuli, whether regarded as Allophylian or Celtic, were abundantly capable of civilisation, and possessed a cerebral capacity fully equal to that of nations which have carried the practical and decorative arts far in advance of a mere archaic period.

One characteristic feature observed in the skulls of various tumuli is the state of the teeth. It is rare to find among them any symptoms of irregularity or decay. Sir R. C. Hoare remarks of those of Wiltshire,—"The singular beauty of the teeth has often attracted our attention; we have seldom found one unsound or one missing, except in the cases of apparent old age. This peculiarity may be easily accounted for. The Britons led a pastoral life, feeding upon the milk of their flocks and the venison of their forests; and the sweets of the West Indies were to them totally unknown." In the tumular cemetery at North Berwick, the teeth of the skulls, though sound, were worn, in most cases completely flat, like those of a ruminating animal. Dr. Thurnam remarks the same to have been the case with the teeth examined by him in those of the Anglo-Saxon cemetery at Lamel Hill; and it is also observable in an under jaw found along with other remains of a human skull, an iron hatchet, and several large boars' tusks, in a deep excavation on the south bank of the Castlehill of Edinburgh. The jaw, with the accompanying relics, are in the Museum of the Scottish Antiquaries. The same peculiarity is referred to, as observed in a remarkable discovery of human remains in the Kent's Hole Cave, near Torquay, made by the late Rev. J. MacEnery during his geological researches in that locality As the account of this discovery, which is accompanied with details of great value to the archæologist, has only been recovered through the zeal of Mr. Edward Vivian, since the death of the author, and printed in a local periodical,[1] it is extracted here at considerable length. It was to Mr. MacEnery's researches that Buckland and others of the earlier modern geologists owed their most valuable data; and some of the rarest palæontological specimens in the British Museum originally belonged to his private collection. Kent's Hole is referred to by Professor Owen, in his History of British Fossil Mammals, as "perhaps the richest cave depository of bears hitherto found in England." The roof is clustered with pendant cones of stalactite, and the floor thickly paved with concretions of stalagmite, the accumulations of many centuries, which have sealed down the floor hermetically, and preserved

[1] Torquay and Tor Directory, Aug. 14, 1850.

the relics both of the geologist and the archæologist safe from disturbance, and protected from decay.

"The floor we found, at our first visit, covered, through its whole extent, with a darkish mould, varying in depth from a few inches to a foot. It only dates since the cavern became a popular place of resort, and the further progress of the stalagmite in open situations was interrupted by the trampling of visitors. In the vestibule were found, deep imbedded in it, those curiously shaped pieces of oak to which the appellation of Druids' sandal was given,[1] together with a quantity of decomposed animal and vegetable matter, the remains of fires and feasts, mingled with rabbit bones. . . . .

"At the hazard of unnecessarily charging the thread of my narrative with seemingly frivolous particulars, I proceed to note down the characters presented by its general aspect, no less than its contents, before it was altered by those operations which have since left no part of it in its virgin state. It is only on a just appreciation of all their circumstances that a true estimate can be founded of those facts which should serve as the basis of all reasoning on its nature and history.

"The floor of the entrance, except that it had the appearance of being broken up, offered nothing remarkable to detain us; we shall have occasion to return to it presently. Not so the lateral branch by which it communicates with the body of the cavern on the left. Under a ledge on the left was found the usual sprinkling of modern bones, and, in the mould beneath, which had acquired the consistence of hard clay, were fragments of pottery, calcined bones, charcoal, and ashes; in the midst of all were dispersed arrow-heads of flint and chert. The ashes furnished a large proportion of the mould.

"In the same heap were discovered round slabs of roofing slate of a plate-like form, some crushed, others entire. The pottery is of the rudest description, made of coarse gritty earth, not turned on a lathe, and sunbaked; on its external margin it bears zigzag indentations, not unlike those represented on the urns found by Sir Richard Hoare in the barrows of Wiltshire. These fragments, there seems no reason for doubting, are the remains of cinerary urns which once contained the substances scattered around, and to which the slates served for covers.

"At a short distance, nearer the entrance, were found, in a continuation of the same mould, articles of bone of three sorts; some of an inch long, and pointed at one end, or arrow-heads; others about three inches long, rounded, slender, and likewise pointed. Conjecture was long busy as to their destination—they were thought by some to be bodkins, by others for confining the hair, like those ornaments used by the women in Italy; lastly, they were supposed, with more probability, to be a species of pin for fastening the skin in front which served savages for garments. The third article does not seem so easy to explain; it is of a different shape, quite flat, broad at one end, pointed at the other, the broad part retains the truncated form of a comb, the teeth of which were broken off near their root; whether it was used as a comb, or for making nets for fishing, is not clear.

[1] "Discovered in the black mould certain rudely shaped pieces of oak, one of which was immediately shewn me by the finder. It was about the length and form of the human foot, and hollowed in the centre, not unlike a sandal." The name, it should be added, was only meant as a convenient distinctive appellation.

There was only this solitary one found, and two of the former, but several of the first, with a quantity of bone chips. All three bore marks of polish.

"Nearer the mouth are collected a good number of shells of the muscle, limpet, and oyster, with a palate of the scarus. This, as well as the nacker of oysters which was thickly disseminated through the mould, served, as they do at the present day among savages, most probably for ornament. The shell-fish may have furnished bait for fishing. The presence of these rude articles render it probable that they were collected here by the ancient aborigines, who divided their time between the chase and fishing in the adjacent sea.

"Close to the opposite wall, in the same passage, buried in black mould, I found a stone hatchet, or celt, of sienite, the only one found in the cavern. Another of the same material, but of a different shape, I found shortly after not far from the cavern near Anstis Cove, which labourers engaged in making the new cut had just thrown up with the mould.

"As we advanced towards the second mouth, on the same level, were found, though sparingly, pieces of pottery. The most remarkable product of this gallery were round pieces of blue slate, about an inch and a-half in diameter and a quarter thick. They may have served, like the Kimmeridge coal, for money. In the same quarter were likewise found several round pieces of sandstone grit, about the form and size of a dollar, but thicker and rounded at the edge, and in the centre pierced with a hole, by means of which they seem to have been strung together like beads. Clusters of small pipes or icicles of spar, such as depended from the roof at our first visit, we saw collected here in heaps, buried in the mud. Similar collections we had occasion to observe accompanied by charcoal, throughout the entire range of the cavern, sometimes in pits excavated in the stalagmite. Copper ore—with these various articles in the same stuff was picked up—a lump much oxydized, which the late Mr. Phillips analyzed, was found to be pure virgin ore.

"Having taken a general survey of the surface of the floor, we returned to the point from which we set out, viz., the common passage, for the purpose of piercing into the materials below the mould. Here in sinking a foot into the soil, (for of stalagmite there remained only the broken edges adhering to the sides of the passage, and which appeared to be repeated at intervals,) we came upon flints in all forms, confusedly disseminated through the earth, and intermixed with fossil and human bones, the whole slightly agglutinated together by calcareous matter derived from the roof. My collection possesses an example of this aggregation in a mass consisting of pebbles, clay, and bone, in the midst of which is imbedded a fine blade of flint, all united together by sparry cement.

"The flints were in all conditions; from the rounded pebble as it came out of the chalk, to the instruments fabricated from them, as arrow and spear-heads, and hatchets. Some of the flint blocks were chipped only on one side, such as had probably furnished the axes, others on several faces, presenting planes corresponding exactly to the long blades found by their side, and from which they had been evidently sliced off; other pebbles still more angular and chipped at all points, were no doubt those which yielded the small arrow-heads. These abounded in by far the greatest number. Small irregular splinters, not referrible to any of the above divisions, and which seem to have been struck off in the operation of detaching the latter, not unlike the small chips in a sculptor's shop, were thickly scattered

through the stuff, indicating that this spot was the workshop where the savage prepared his weapons of the chase, taking advantage of its cover and the light.

"I have discovered in this passage precisely similar arrow-heads to those which I detected in an urn from a barrow presented to me by the Rev. Mr. Welland.

"With the exception of the Boar spear [of iron] and a blade of the same metal found not far from it, very much rusted, all the articles in the mould or in the disturbed soil consisted of flint, chert, sienite, and bone—such primitive substances as have been in all countries and down to the present, used by the savage for the fabrication of his weapons, whether for the chase or battle.

"At a still greater depth, near the common entrance in the passage, lay extended lengthwise in the ordinary position of burial, the remains of a human skeleton much decayed; two portions only of the jaw and some single teeth, with the mouldering vertebræ and ribs, were all that remained. As in the case of the flint knife mass, already described, there adhered to the jaw portions of the soil on which it lay, and of the stalagmite which partly covered it.

"The teeth were so worn down that the flat crowns of the incisors might be mistaken for molars,[1] indicating the advanced age of the individual. M. Cuvier, to whom I submitted the fragment in 1831, was struck with the form of the jaw. He pronounced it to belong to the Caucasian race. He promised to bestow particular notice on it, but death, unhappily for science, put a stop to his labours. All the specimens, together with a collection of fossil bones, the third I had presented to the museum of the Jardin des Plantes, I transmitted to him before I quitted the continent, and they may be found among his effects. The skeleton lay about a foot and a half below the surface; from the tumbled state of the earth, the admixture of flags of stalagmite, added to the presence of flint articles and pieces of slate, it was manifest that the floor had been dug up for the reception of the body, and that it was again covered over with the materials thrown up from the excavation. The earthy covering consisted of the red soil, containing fossil bones mixed up with recent mould, the mound of earth outside the mouth, at the right hand, was thrown up from the passage to render it more accessible. It was precisely that which covered the human skeleton, and contained the admixture of human and fossil relics.

"Previous to the disturbance of the floor for the admission of the body, it would appear, from the presence of flags of stalagmite in the rubble, that it was covered with a continuous crust, the edges indeed of which still adhere to the sides. It further appears from the repetition of similar crusts, as indicated by the broken edges at the sides, that there were periods of repose which allowed new floors to form, marking clearly their repeated destruction and renovation at intervals of time.

"With the exception of single teeth and an occasional rib or vertebra in charcoal, which may have possibly belonged to the same subject, there were no other traces of human remains."[2]

[1] In the original notes from which the memoir appears to have been compiled, the condition of this skeleton is thus described:—"Its teeth, most of which I collected, are with one exception sound and undiscoloured, that they belonged to a robust adult, they and the fragments of the skull and vertebræ abundantly testify. The front or incisor teeth are what are called *double teeth*."

[2] Cavern Researches, or Discoveries of Organic Remains, and of British and Roman Reliques in the Caves of Kent's Hole, Anstis Cove, &c. By the Rev. J. MacEnery, F.G.S.

The peculiarity in the teeth of certain classes of ancient crania above referred to is of very general application, and has been observed as common even among British sailors. The cause is obvious, resulting from the similarity of food in both cases. The old Briton of the Anglo-Roman period, and the Saxon both of England and the Scottish Lothians, had lived to a great extent on barley bread, oaten cakes, parched peas, or the like fare, producing the same results on his teeth as the hard sea-biscuit does on those of the British sailor. Such, however, is not generally the case, and in no instance, indeed, to the same extent in the skulls found in the earlier British tumuli. In the Scottish examples described above the teeth are mostly very perfect, and their crowns not at all worn down. In that marked No. 5, one of those found at Cockenzie, the under jaw has been preserved, and in it the wisdom teeth are only partially developed, indicating the age of the individual. The perfectly formed teeth are not much more worn than those which had never pierced the gums.

The inferences to be drawn from such a comparison are of considerable value in the indications they afford of the domestic habits and social life of a race, the last survivor of which has mouldered underneath his green tumulus, perchance for centuries before the era of our earliest authentic chronicles. As a means of comparison this characteristic appearance of the teeth manifestly furnishes one means of discriminating between an early and a still earlier, if not primeval period, and though not in itself conclusive, it may be found of considerable value when taken in connexion with the other and still more obvious peculiarities of the crania of the earliest barrows. We perceive from it, at least, that a very decided change took place in the common food of the country, from the period when the native Briton of the primeval period pursued the chase with the flint lance and arrow, and the spear of deer's horn, to that comparatively recent period when the Saxon marauders began to effect settlements and build houses on the scenes where they had ravaged the villages of the older British natives. The first class, we may infer, attempted little cultivation of the soil. Improving on the precarious chances of a mere nomadic or hunter life, we have been led to suppose, from other evidence, that the early Briton introduced the rudiments of a pastoral life, while yet his dwelling was only the slight circular earth-pit, incovered with overhanging boughs and skins. To the spoils of the chase he would then add the milk of his flock of goats or sheep, probably

with no other addition than such wild esculents, mast, or fruits, as might be gathered without labour in the glades of the neighbouring forest. But the social state in the British Isles was a progressive one. Whether by the gradual improvement of the aboriginal race, or by the incursion of foreign tribes already familiar with the fruits of agricultural labour, the wild pastoral or hunter life of the first settlers was exchanged for one more suited to call forth the social virtues. The increase of the population, whether by the ingress of such new tribes, or by the numerical progression of the first settlers, would of itself put an end to the possibility of finding subsistence by means of the chase. Thus it might be from the inventive industry which privations force into activity that new wants were first discovered, new tastes were created, and satisfied by the annual harvests of golden grain. The ploughshare and the pruning-hook divided attention with the sword and the spear, which they could not supplant; and the ingenious agriculturist devised his oaken querne, his stone-rubber, or corn-crusher, and at length his simple yet effective hand-mill, which resisted, during many centuries of change and progress, all attempts to supersede it by more complicated machinery. Dr. Pettigrew, in communicating the results of a series of observations on the bones found in various English barrows, remarks, —"The state of the teeth in all of them indicated that the people had lived chiefly on grain and roots."[1] The dry, hard oaten cake of the Scottish peasant, which may have been in use almost from the first attempt at cultivation of the favourite national grain, would probably prove as effective as any of the presumed vegetable foods for producing such results. We need not, at any rate, evidence to satisfy us that the luxuries which have rendered the services of the dentist so indispensable to the modern Briton were altogether excluded from the regimen of his rude forefathers.

Sir Richard Colt Hoare commences the great work which has secured for him so distinguished a place among British archæologists, with the motto—"We speak from facts, not theory." While seeking to render the *facts* of Scottish Archæology fully available, it is my earnest desire to follow in the footsteps of a leader so proved. The inferences attempted to be deduced from such facts as have been accumulated here, with a view to discover some elementary principles for the guidance of Scottish archæologists, are such as appear natu-

[1] Archæological Journal, vol. i. p. 272.

rally and logically to follow from them. Still they are stated apart from the premises, and those who have followed thus far ungrudgingly in exploring the primeval sepulchres of Scotland, will find no difficulty in pausing ere they commit themselves to the same guidance in seeking also some glimpses of the native hearth and pastoral inclosures, and of the evidences of that inventive skill which succeeded to such simple arts. We would fain reanimate the ashes in these long buried urns, and interrogate the rude British patriarch regarding a state of being which for centuries—perhaps for many ages—pertained on these very spots where now our churches, palaces, and our homeliest dwellings are reared, but which seems almost as inconceivable to us as that other state of being, to which we know the old Briton, with all the seed of Adam, has passed.

It may appear to some a service of little value, the unrolling of these "mute inglorious" records. Yet somewhat is surely gained when we reach the beginnings of things, and substitute for the old historic mist-land of myth and fable, a coherent and intelligible, though dry and somewhat meagre array of facts and legitimate deductions. It is no longer needful, however, to defend the object of our research. It is to some extent the same which the ethnologist is pursuing by a different route; though the palæontological investigations of the archæologist have yet to establish their true value in the estimation of men of science by the nature of their results. For this we wait in hope. I would only meanwhile repeat, that we cannot be justified in concluding any knowledge which once existed to be utterly lost beyond recall; and if the geologist has been able to recover so much from annals that seemed to have been folded up and laid aside ere this race was summoned into being to people a renovated world, surely we ought not to despair of being yet able to fill up our meagre outline with many details which shall satisfy the severest demands of inductive philosophy, and rest their claims to acceptance not on theory but on fact.

PART II.

THE ARCHAIC OR BRONZE PERIOD.

" In those old days, one summer noon, an arm
Rose up from out the bosom of the lake,
Clothed in white samite, mystic, wonderful,
Holding the sword Excalibur." MORTE D'ARTHUR.

CHAPTER I.—INTRODUCTION OF METALS.

THE evidence adduced in the previous section furnishes the basis of the argument from whence we arrive at the conclusion, that Scotland and the whole British Isles were occupied by a human population many ages prior to the earliest authentic historical notices. Of the character and habits of the barbarian Briton of the primeval period we have also been able to arrive at some knowledge. His dwellings, the remains of which have lain unheeded around the haunts of so many generations, shew his domestic accommodation to have been of the simplest and most humble description. His imperfect tools and weapons furnish no less satisfactory evidence of his scanty knowledge, his privations, and his skill. Searching amid the records of that debateable land to which the geologist and the antiquary lay equal claim, we learn that vast areas of our country were covered at that remote era with the primitive forest; that oaks of giant height abounded where now the barren heath and peat-bog cumber the land; and that even, at a comparatively recent period,

the fierce Caledonian bull, the wolf, and the wild boar asserted their right to the old forest-glades. The primitive Caledonian was, in fact, an untutored savage. The race was thinly scattered along the skirts of the continuous range of forest, occupying the coasts and river valleys, and retreating only to the heights or the dark recesses of the forest when the fortunes of war compelled them to give way before some more numerous or warlike neighbouring tribe. The vast forests which then occupied so large a portion of the soil, while they confined the primitive inhabitants to the open country along the coasts and estuaries, supplied them with more valuable fruits than the unoccupied grounds could have afforded to their scanty numbers and untutored skill. Besides the fiercer natives of the forest, we are familiar with the remains of the elk and the rein-deer, as well as of smaller beasts and birds of chase. In the Anglo-Saxon Ode on Athelstan's Victory, in which—

Scotta leode,	The Scottish lads
And scip flotan	And the men of the fleets
Fæge feollon.	In fight fell,

we have the following curious enumeration from the old MSS. in the British Museum, dated A.D. 937, in Gibson's Chronicle, and supposed to be written by a contemporary bard:[1]—

The war screamers
Left they behind;
The hoarse bittern,
The sallow paddock,
The swarth raven
With horned bill,
And the wood-housing heron
Eating white fish of the brooks,
The greedy gos-hawk,
The grey deer,
And wolf wild.

We are not without abundant evidence that the primitive Caledonian waged successful war with the wild natives of the forest. By arrow,

[1] Ellis's Specimens. The abundance of wild beasts and game of all kinds in the Caledonian forests is frequently alluded to. Boece describes "gret plente of haris, hartis, hindis, dayis, rais, wolffis, wild hors, and toddis." (Bellenden's Boece. Cosmographe, chap. xi.) The following curious enumeration in Gordon's History of the House of Sutherland, (fol. p. 3,) written about 1630, furnishes a tolerably extensive list of wild natives of Sutherland even in the seventeenth century:—"All these forrests and schases are verie profitable for feiding of bestiall, and delectable for hunting. They are full of reid deir and roes, woulffs, foxes, wyld catts, brocks, skuyrrells, whittrets, weasels, otters, martrixes, hares, and fumarts. In these forrests, and in all this province, ther is great store of partriges, pluivers, capercalegs, blackwaks, murefowls, heth-hens, swanes, bewters, turtledoves, herons, dowes, steares or stir-

sling, and lance, and also, no doubt, with help of gins and traps, the largest and fiercest of them fell a prey to the wild hunter. The horns especially of the deer supplied him with weapons, implements, ornaments, and sepulchral memorials. His wants were few, his tastes simple and barbarous, his religion probably as unspiritual as the most base of savage creeds. In the long wanderings of his nomade fathers across the continents of Asia and Europe, they had greatly deteriorated from the primal dignity of the race, they had forgotten all the heaven-taught knowledge of Eden, and had utterly lost the antediluvian metallurgic arts. It may perhaps be asked if the annals of so mean a race are worthy of the labour required in dragging them to light from their long-forgotten repositories? The answer is, they are our ancestry, even though we may question our lineal descent; our precursors, if not our progenitors. From them we derive our in-

lings, lair-igigh or knag, (which is a foull lyk vnto a paroket or parret, which maks place for her nest with her beck in the oak trie,) duke, draig, widgeon, teale, wildgouse, ringouse, routs, whaips, shot-whaips, woodcok, larkes, sparrowes, snyps, blakburds or osills, meweis, thrushes, and all other kinds of wildfowle and birds, which ar to be had in any pairt of this kingdome. Ther is not one strype in all these forrests that wants trouts and other sorts of fishes. . . . Ther is vpon these rivers, and vpon all the cost of Southerland, a great quantitie of pealoks, sealghes or sealls, and sometymes whaills of great bignes, with all sorts of shell fish, and dyvers kynds of sea-foull." When we remember that this ample inventory is of a late date, and lacks not only the Caledonian bull, the elk, and "the wild-bore, killed by Gordoun, who for his valour and great manhood was verie intire with King Malcolme-Kean-Moir," but also, in all probability, many more of the older prizes of the chase, we can readily perceive the abundant stores that lay within reach of the thinly-peopled districts of the primitive era. One of the most interesting of the extinct animals of Scotland, on many accounts, is the beaver, (*Castor Europæus,*) already referred to among the mammals of the primeval transition. Its remains have been discovered under circumstances indicative of equal antiquity with the extinct mammoth, (Owen, p. 191.) But their most frequent situation is at the bottom of the peat-bog; as in the Newbury peat-valley, where they were found twenty feet below the present surface, associated with the remains of the wild-boar, roebuck, goat, deer, and wolf. Fine specimens of a skull, under-jaw, and haunch bone, found in Perthshire, and now in the Museum of the Scottish Antiquaries, have been made the subject of a valuable memoir by Dr. P. Neill, a Fellow of the Society, in the Edinburgh Philosophical Journal, (vol. i. p. 183, and Wern. Mem. vol. iii. p. 207.) Dr. Neill, Professor Fleming, and subsequent writers, including Professor Owen, in referring to the historical notices of the beaver, remark on the absence of any mention of such an animal in the Scottish public records. This, however, is an error. In an Act of David I. fixing the rate of custom-duties, beavers' skins are mentioned among the Scottish exports, along with those of the fox, the weasel, the martin, the wild cat, the ferret, &c.—"Of Peloure.—Of a tymmyr of skynnis of toddis, quhytredis, mertrikis, cattis, *beueris*, sable firettis, or swylk vthyr of ilk tymmyr at þe outpassing, iiij ₰." Of þe tymmer of skurel, ij ₰," &c., (Act. Parl. Scot. vol. i. p. 303.) Dr. Neill has pointed out the interesting fact, that the Scottish Highlanders still retain a peculiar Gaelic name for the beaver, *Dobran losleathan*, the broad-tailed otter. By the Welsh it is called *Llosdlydan*, and Pennant refers to waters in the principality still bearing the name of the Beaver Lake.

heritance and birthright; nor, amid all the later mingling of races, can we assume that no drop of their blood mingles in our veins.

There can be no question that this aboriginal race continued to occupy their island home, with slow and very slight progression, for many centuries. The disclosures of the latest alluvial deposits have furnished evidence of the appearance which the face of the country presented within the historic era, and leave no room to doubt that vast forests covered so large a portion of the soil as to afford no great area for the occupation of its aboriginal colonists. Taking into account with this the abundance of those rude weapons and implements from whence we give that era the name of the Stone Period, and the general uniformity of the circumstances under which they are discovered, we are furnished with satisfactory evidence of a thinly peopled country, occupied by the same tribes with nearly unchanging habits for many ages.

The elements, however, of a great revolution were at length introduced among this simple race, and, as usual in the history of progressive civilisation, they appear to have come from without. The change by which we detect the close of the long era of barbarism, and the introduction of a new and more advanced period, is the discovery of the art of smelting ores, and the consequent substitution of matallic weapons and implements for those of stone. The former presents us with the helplessness of childhood without its promise; the latter is the healthful infancy of a vigorous and magnificent manhood.

The insular position of Britain has already furnished an indisputable and well-defined base on which to rear the argument of primitive colonization. The valuable mineral wealth of some portions of its soil happily supply no less satisfactory data for those of its early civilisation. Little doubt can now be entertained that Herodotus, in his allusions to the Cassiterides, or Tin Islands, refers to the celebrated districts of Cornwall and the neighbouring isles, which still abound with the same mineral wealth that conferred on them such ancient and wide-spread fame. The era of the father of history dates from B.C. 484—the year assigned as that of his birth—probably to nearly the close of the century. At this early period, then, while the Republic of Rome was only assuming form, and Athens was just rising into importance, the commerce of the British Isles attracted the navies of Tyre and Carthage; nor does it seem improbable that the Phœnicians traded with the miners of Cornwall and the Scilly Islands

at a much earlier period, if indeed we must not look to these ancient Cassiterides as one of the chief sources from whence even the Egyptians and Assyrians derived the tin with which they alloyed and hardened their earliest tools. More definite, and, as it is believed, authentic information regarding the British Isles is derived from the "Ora Maritima" of Festus Avienus, circa B.C. 400, from which we learn that Britain was visited at that early period by Carthaginian voyagers, and that the *Albiones* occupied the larger island, while the smaller island was possessed by the *Gens Hibernorum*. In so far as this early writer may be relied upon, his observations appear to sanction the conclusion that a pure Celtic population then possessed the whole British Isles, and that it is in the interval between this epoch and the invasion of Julius Cæsar that we must look for the intrusion of the newer continental races, indiscriminately termed by Cæsar, *Britanni*. In complete confirmation of this, and of the consequent retreat of the aboriginal Albiones towards the remoter districts, we find the name of Albion afterwards exclusively applied to the northern part of Britain, and all the earliest traditions and writings of both the Welsh and Scottish Celtæ assigning to them the name of Albanich. A Celtic race, however, continued to occupy the primeval districts of Cornwall, and preserved almost to our own day a distinct dialect of the Celtic tongue.

The familiarity of the ancient Britons with tin, though this metal does not occur in a native state, may be readily accounted for from the ore being frequently found near the surface, and requiring only the use of charcoal and a very moderate degree of heat to reduce it to the state of metal. We have no specific mention of any other source from whence the ancients derived the tin which they compounded with the copper found so abundantly in several parts of Asia; with the single and somewhat vague exception made by Strabo, where he calls a certain place in the country of the Drangi, in Asia, by the name of Cassiteron. That tin was known, however, from very early times is proved, not only by the discovery of numerous early Egyptian and Assyrian bronze relics, but also by its being noted by Moses among the spoils of the Midianites which were to be purified by fire;[1] and by Ezekiel among the metals of which Tarshish was the merchant of Tyre.[2] The allusions of Herodotus leave no room to doubt that his information was derived indirectly from others. The Phœnicians

[1] Numbers xxxi. 22. [2] Ezekiel xxvii. 12.

long concealed the situation of the Cassiterides from all other nations; and even Pliny treats as a fable the report of certain islands existing in the Atlantic from whence white-lead or tin was brought. It need not therefore surprise us to learn so little of these islands from ancient writers, even though we adopt the opinion that they continued for many centuries to be the chief source of one of the most useful metals. Antimony is found in the Kurdish mountains, and pure copper ore abounds there, as well as in those of the desert of Mount Sinai, but no tin is known throughout any part of Assyria. It is indeed a metal of rare occurrence, though found in apparently inexhaustible quantities in a very few localities. The only districts, according to Berzelius, where it is obtained in Asia, are the island of Banca, only discovered in 1710, and the peninsula of Malacca, where Wilkinson conceives it possible that tin may have been wrought by the Egyptians. The mines of Malacca are very productive, and may have been the source from whence Tyre derived "the multitude of riches," but we have no evidence in support of such conjectures. Cornwall still yields a larger quantity of the ore than any other locality of the Old or New World where it has yet been discovered, and many thousands of tons have been exported by modern traders to India and China, and to America. Taking all these circumstances into consideration, it seems in no degree improbable, that long before Solomon sent to Tyre for "a worker filled with wisdom, and understanding, and cunning, to work all works in brass," or employed the fleets of Hiram, King of Tyre, to bring him precious metals and costly stores for the Temple at Jerusalem, the Phœnician ships had passed beyond the pillars of Hercules, and were familiar with the inexhaustible stores of these remote islands of the sea which first dawn on history as the source of this most ancient alloy. Strabo's description of the natives of the Cassiterides is not to be greatly relied upon. According to him they were a nomade pastoral race, of peaceful and industrious habits; but he refers especially to their mines of tin and lead, the produce of which they exchanged with the foreign traders, along with furs and skins, for earthenware, salt, and copper vessels and implements.

It is scarcely possible to conceive of such an intercourse carried on for centuries, by nations far advanced in the arts, and familiar with the civilisation and learning of the oldest races of Asia and Africa, without the natives of the Cassiterides acquiring from them some

knowledge of the fruits of ancient civilisation. From them, indeed, it has been supposed that the British miner first learned even to smelt the ores, though we are almost forced to the conclusion that the working of the mines must have originated with natives or new colonists, familiarized in some degree with the nature of the metals, and with metallurgic arts. It seems surprising, however, that relics formed of the most abundant native metal, tin, should not be found in the tumuli. The facility with which it could be wrought rendered it readily convertible into personal ornaments, equally beautiful as those so abundant in copper and bronze. Borlase describes a patera of tin found at Bossens, in the parish of St. Erth, Cornwall, in 1756, rudely inscribed in mixed characters,—ΛIVIVS . MOΔESTVS ΔηIVΛI . F . ΔEO . MARTI.[1] Along with this were two other vessels of the same metal, an uninscribed patera, and a vase or præfericulum. In 1793 a tin cup of singular form was found, along with a circular ornament of bronze, evidently of native British workmanship, in searching for the ore in a stream work called Hallivich, in the same county,[2] so that we are not without some evidence that this metal was employed at an early period in the manufacture of sacred and domestic vessels. Probably, indeed, we should infer, from the great rarity of such relics, that it was only so used before its native workers had learned to mix it with copper and produce the more useful alloy which superseded the pure metals; as bronze and copper appear to have been at first imported, and received in exchange for the pure tin. Barter, however, could not possibly be continued for centuries, exchanging the ore of a metal so readily fusible as tin for wrought materials of copper, whether pure or alloyed—a metal found in the same locality, in a state requiring little smelting to bring it into use—without the British miner and trader learning to turn their own native mineral wealth to account. The facilities of a metallic currency were also little likely to remain unappreciated by the British trader, familiar as these already were to the seamen of the Mediterranean, or the Phœnician colonists of Cadiz, the ancient Gadeira. Independently of the ring-money which was probably derived from these sources, evidence in confirmation of this idea is not wanting. So recently as the year 1833 a bifrontal bust of the Egyptian Isis

[1] Borlase's Cornwall, vol. i. p. 317. Plate xxviii.

[2] Archæologia, vol. xvi. p. 137. Plates ix. and x.

was dug up in South Street, Exeter.[1] According to Mr. W. T. P. Shortt's reading of the hieroglyphics upon it, it is inscribed with the prefix *Isis, Lady, Mistress of the World.* Beneath this has been a cartouche, the greater portion of which is unfortunately cut away. Mr. Shortt conceives it to have been the cartouche of Cleopatra Tryphæna, of the race of the thirteenth Ptolemy, B.C. 51; but as there is only the fragment of one of the phonetics, this reading is necessarily conjectural. In 1835 some Carthaginian medals were found at Abbeville, in Picardie; and at Noyelles sur Mer, another figure of Isis was discovered in bronze, along with a statuette of the Hawk-headed deity, or elder Horus.[2] Egyptian relics of the era of the later Ptolemies are not unknown as accompaniments of Roman sepulchral deposits, both in Britain and on the Continent; but they must be assumed to belong to an older era when found along with Greek and Carthaginian coins.

But more conclusive evidence exists in proof of early intercourse with the Mediterranean, if not, indeed, of the opinion advocated by a zealous local antiquary, that Exeter had been the seat of a Phœnician colony many centuries prior to the arrival of the Romans.[3] It was long maintained by the great majority of English numismatists, that the Britons had no native coinage prior to the Roman invasion and the mintage of Cunobeline,—the work, as is presumed, of a Roman artist. The evidence against the existence of an early native coinage was, at best, purely negative, and is now giving way before the investigations of our ablest numismatists. The coins peculiar to the Channel Islands are generally acknowledged to be of an earlier character, and it is maintained not only that a native mintage existed prior to the Roman invasion, but that the convex and concave form, which characterizes the earliest British types, affords evidence that they were formed in imitation of Greek coins.[4] The Rev. Beale Post has most ingeniously traced the Gaulish coinage to its primitive Greek type. The conclusions he arrives at are, that about B.C. 600, the Phœnicians colonized Marseilles, subsequent to which coins of that city make their appearance,

[1] Collectanea Curiosa Antiqua Dunmonia, by W. T. P. Shortt, Esq., p. 71.

[2] Mémoires de la Société d'Emulation d'Abbeville, 1844-1848, p. 185.

[3] W. T. P. Shortt, Esq. of Heavitree, near Exeter. Antiqua Dunmonia, Pref. p. iv. *Vide* also Sylva Antiqua Iscana, pp. 79, 88, 89, 90, 91, 93-105. Gent.'s Mag., Aug. and Sep. 1837, &c., for notices of the discovery of numerous early Greek and Egyptian, and some Phœnician coins.

[4] Numismatic Chronicle, vol. i. p. 8. *Vide* also the able series of Articles by the Rev. Beale Post, on the coins of Cunobeline, and of the Ancient Britons. Journ. of Archæol. Assoc. vols. i. ii. iii. iv. and v.

their type being that of human heads, birds, beasts, &c. About B.C. 335 the Gauls adopted as their model the gold coinage struck by Philip II. of Macedon, and from that early Greek type, with its reverse of Diana driving her biga, we may trace the original of all the singular and rude representations of the horse on the primitive Gaulish and British native coinage, which have been supposed to involve so many mythological fancies. There is something greatly more characteristic of the imperfect ideas of a native currency likely to be formed by a primitive and partially civilized people, in this arbitrary imitation of a foreign type, than in any abstruse embodiment of the national creed. No precise date has yet been attempted to be assigned for the first native British coinage, but the numerous examples of Gaulish types discovered in Britain leave no room to doubt that the native Britons were familiar with such a circulating medium long prior to the Roman invasion. Nor is this the most primitive form of native currency. Several hoards have been discovered at different times in Scotland, of small gold pellets, marked with a cross or star in relief, and which, there can be little doubt, is the earliest Scottish minted money.[1] Examples of this primitive coinage are more particularly described in a subsequent chapter, among the contents of the later tumuli.

But entirely apart either from this or the coinage derived from the Gauls, very remarkable discoveries of ancient foreign coins, such as those referred to above, suffice to suggest the probability that the primitive Briton had other sources from whence to acquire a knowledge of the convenience and fashion of a coined circulating medium. In the same locality where the bust of the Egyptian Isis was dug up

[1] Boece assigns the earliest native Scottish coinage to an apocryphal king Donald, *circa* A.D. 200. This account, however, includes some interesting notices of hoards discovered in his own day: "King Donald was the first king of Scottis that prentit ane penny of gold or silver. On the ta side of this money was prentit ane croce, and his face on the tothir. The Scottis usit na money, bot merchandice, quhen thay interchangeit with Britonis and Romanis, afore thir dayis, except it war money of the said Romanis or Britonis, as may be previt be sindry auld hurdis and treasouris, found in divers partis of Scotland, with uncouth cunye. For in the yeir of God M.DXIX. yeris, in Fiffe, nocht far fra Levin, war certane penneis found, in ane brasin veschell, with uncouth cunye; sum of thaim war prentit with doubill visage of Janus; otheris with the stam of ane schip; otheris had the figure of Mars, Venus, Mercurius, and siclike idolis; on otheris war prentit Romulus and Remus soukand ane wolf; and on the tothir side war prentit S. P. Q. R. Siclike, in Murray-land, beside the see, in the ground of ane auld castill, the yeir of God M.CCCCLX. yeris, was found ane veschell of merbill, full of uncouth money; on quhilkis was prentit the image of ane ganar fechtant with edderis,"—*i.e.*, a goose fighting with adders.—Bellenden's Boece, book iv. chap. xvi.

at Exeter, numerous Greek coins have been found of late years, chiefly belonging to the autonomous Greek colonial cities in Syria and Asia Minor. Many have been discovered pertaining to Alexandria in Egypt, including coins of the Ptolemies of a very early date, frequently met with at great depths, and apparently in older strata than that of the Anglo-Roman period.[1] In making a large drain in the Fore Street of Exeter, in 1810, at a depth of twenty feet below the present pavement, an immense quantity of ancient money was found, including many early coins of the autonomous Greek cities, and along with them two British coins, one bearing the wheel and the other the horse.[2] Coins of Agrigentum, in Sicily, of Hiero I. of Syracuse, B.C. 460; of Ptolemy I. B.C. 323, and many others described and engraved in Mr. Shortt's interesting works, have been found at various times in Exeter and its neighbourhood.

But though these singularly interesting tokens of intercourse with the Phœnician and Greek maritime colonies long prior to the era of the Roman occupation of Britain abound, as might be anticipated, only in the localities where mineral wealth tempted the sojourn of the ancient trader, yet some few remarkable traces of the same communication with the elder empires of the world have been found within our more northern limits. Occasionally Greek coins have been discovered in Scotland; as, for example, a gold didrachm of Philip of Macedon, three Greek silver coins, including one of his son, and a brass of the Brutii in Magna Græcia, found on the estate of Cairnbulg, Aberdeenshire, in 1824; and a very fine gold coin of Alexander the Great, at Ecclefechan, Dumfriesshire.[3] In the year 1845 a still more remarkable hoard was discovered on the farm of Braco, in the parish of Shotts, Lanarkshire, only a very small portion of which was rescued from the usual fate of such recovered treasures. I have examined a few of these, in the hands of John Henderson, Esq., Queen's Remembrancer for Scotland. They include of Greek coins: one of Athens, obverse Archaic head of Pallas; reverse: *A Θ*, owl in deep indented square, an olive branch behind. One of Phocis, obverse: laureated head of Apollo; reverse: full-faced head of bull. One of Bœotia, obverse: Bœotian shield; reverse: vase. Also one Parthian coin. (Eckhel, vol. i. p. 254. Arsaces xv.) A correspondent from whom I first received information of this important discovery, saw several more of

[1] Sylva Antiqua Iscana, p. 79, Plate VI.

[2] Ibid. p. 90, where a minute account of the coins is given. Also pp. 76, 88, 91, 93, &c.

[3] New Statist. Acco. vol. iv. p. 292.

the Athenian type; some with the Greek scarabæus or tortoise, and others, which from the description appear to have been Parthian coins. But on inquiry being made after them, nearly the whole disappeared, and it is to be feared were immediately consigned to the melting pot. This remarkable hoard, unequalled in historic value, as far as I know, by any discovery of coins yet made in Scotland, may perchance after all have only been the treasure of some Roman auxiliary, as Braco is on the line of the iter which came from the south, towards the station of Castlecarry, on the wall of Antoninus Pius. Only the year after, a most valuable hoard of undoubted Roman treasure was found on the same farm. According to the account of their discoverer—a farm servant—"nearly a barrowful" were recovered, but they were squandered and lost before information of the discovery could reach those who were competent to appreciate their value as anything but old metal. An intelligent correspondent, to whom I am indebted for some particulars of this last discovery at Braco, succeeded in securing a few of the coins, comprehending Vespasian, Titus, both the Antonines, Lucius Verus, both the Faustinas, Trajan, Hadrian, and Commodus. These, however, lay entirely apart from the former hoard, and apparently much nearer the surface, so that we need not necessarily assume the deposition of the former coins, belonging to a period so long prior to the era of Roman invasion, as depending on the Roman iter, which like more recent thoroughfares, may have followed in the line of older pathways through the Caledonian forests.

Along with these examples, suggestive of direct or indirect intercourse between the early Britons and Greek or Phœnician traders, should also perhaps be mentioned two Greek altars in the British Museum, found at Corbridge in Northumberland; the one dedicated to the Syrian Astarte, thus—ACTAPTHC, BΩMON M'ECOPAC ΠΟΥΛΧΕΡ M'ANEΘHKEN. On its sides are sculptured the most common sacrificial vessels, the præfericulum and patera, and the top is crowned with the usual thuribulum of the Roman altar. The other, which was discovered in the church-yard of Corbridge, is dedicated to the Tyrian Hercules. It bears on the one side a bull's head, with the secespita beside it, and on the other a laurel crown. In front is the inscription,—HPAKΛEI TYPIΩ ΔIOΔΩPA APXIEPE, A.

The curious reader will find by reference to the Archæologia,[1] how

[1] Archæologia, vol. ii. p. 92; vol. iii. pp. 234, 332. A monumental tablet, dedicated to the memory of Antiochus Lysimachus, now in the Museum of the Scottish Anti-

the learned reconcile with previous theories the discovery in this northern region of altars thus dedicated to Phœnician deities, to whom according to Josephus, Hiram king of Tyre, the contemporary of Solomon, erected separate temples. Camden records, on the authority of Solinus, called Polyhistor, that a votive altar was erected in North Britain, in honour of Ulysses, and inscribed in Greek characters.[1] Whatever credit be attached to this, we have no reason to doubt that Greek voyagers traded to the British Isles long before the Roman war galleys touched its shores; though the site of the former altars, near the Roman wall, and their correspondence in form and decorations to the Roman altars so frequently found in Britain, seem to justify the conclusion that they are the work of Greek auxiliaries of the Anglo-Roman era, and indicate a late rather than an early date within that period.

The interest which attaches to the determination of the extent and probable date of the first intercourse of the Britons with traders from the far east, has led to the anticipation of some points not strictly belonging to the present section of our inquiry. This question of the existence of a native coinage, or of the substitution of a foreign metallic currency for the rude process of barter, at a period prior to the introduction of Roman customs by the legionaries of the first and second centuries, well merits the careful study it is now receiving, since no other evidence could furnish equally satisfactory proof of early progress in social civilisation. It cannot admit of doubt, however, that long before even the Greek or Phœnician trader had taught the Cornish miner this ingenious substitute for a direct exchange of commodities, he had learned to fuse and work the rich veins of ore with which his native soil abounded, and to fashion them into a variety of personal ornaments as well as of weapons and implements. The Phœnician sought his tin in order to mix it with the copper which he already possessed, and thereby to produce bronze weapons combining the ductility of copper with that indispensable hardness which could alone fit them to supersede the older implements of stone. How early this interchange first took place, it appears now altogether vain to inquire. The evidence already adduced, however, is at least suffi-

quaries, is engraved and described by mistake in Stuart's "Caledonia Romana" as *the only Greek inscription which has been met with north of the Tweed.* It was found, along with a statue of Esculapius and other fine marbles, near the fountain of Cyrene, on the site of an ancient Greek colony in Africa.

[1] Gibson's Camden, p. 926.

cient to justify us in assigning to it a very remote period, while the more abundant and far more useful metal, iron, was little known even to the oldest nations along the Mediterranean coasts. Worsaae remarks, "There are geological reasons for believing that the Bronze Period must have prevailed in Denmark five or six hundred years before the birth of Christ."[1] Denmark, however, had all its metal to import, while the earliest historic allusion to England represents her exporting her abundant metallic ores, and bartering them with the southern merchant for the productions of his superior skill. The metallic riches of England have not escaped the attention of the intelligent Danish archæologist:—"It is highly probable," he remarks, "that the ancient bronze, formed of copper and tin, was diffused from one spot over the whole of Europe; which spot may be supposed to be England, because, not to mention the quantity of copper which that country produces, its rich tin mines have been known from the earliest historic periods to the nations of the south, while in the other parts of Europe there occur only very few and doubtful remains of far less important tin mines which we are justified in believing to have been worked at that time."[2]

When we consider that copper is not only found in a state requiring little smelting to render it fit for manufacture, but that it is even discovered at times so pure that we may conceive of its occasional substitution for stone implements, before the art of smelting had become known, we can feel no hesitation in assuming, *a priori*, that it was the precursor of iron as a material for the construction of weapons and tools. Iron, on the contrary, bears, in its natural state, little resemblance to a metal, and is smelted by so difficult and tedious a process that, even after its superiority had become known, the older metal would probably be preferred by the natives of a thinly peopled country, where the benefits of mutual cooperation and the division of labour still remained among the unsolved problems of their political economy. The tools and weapons of the ancient Mexicans we know were of copper, and we are not without evidence that even the Egyptians were far advanced in their early developed civilisation before iron had superseded the older copper tools. The architectural monuments of Mexico and Yucatan show how much might be accomplished with such imperfect implements. Both in the magnificent work of the French savans, and in the more accurate delineations of M. Rosel-

[1] Primeval Antiquities, p. 135.

[2] Primeval Antiquities, p. 45.

lini, various Egyptian paintings are shewn, in which the implements of the sculptors are evidently of bronze or copper, and workmen are seen cutting blocks of granite and hewing out colossal statues with yellow tools. Numerous bronze weapons, implements, and personal ornaments found in the catacombs, attest the use of this metal by the Egyptians at a comparatively late period. Implements of copper are also among the relics found in some of the ancient and long abandoned mines discovered in Asia. The celebrated tables in the copper mines of Wady Maghara, near Sinai, record the conquest of that part of Asia by Suphis, the builder of the great pyramid, and prove that these mines had been wrought prior to the early date of his reign. Dr. Layard also refers to copper mines still existing in the mountains within the confines of Assyria, worked at a very remote period, probably by the Assyrians, and used not only to supply the material for ornaments, but also for weapons and tools.[1] But there is not wanting abundant direct evidence to prove that Asia had her Bronze Period as well as Europe and Africa. Dr. Prichard remarks, "Silver and golden ornaments of rude workmanship, though in abundant quantity, are found in the Siberian tombs. The art of fabricating ornaments of the precious metals seems to have preceded by many ages the use of iron in the northern regions of Asia."[2] A very interesting account is given in the Archæologia of a tumulus opened in the neighbourhood of Asterabad, on the south-eastern shores of the Caspian Sea, in 1841. It contained several vessels and two small trumpets, all of pure gold; spears, pikes, forks, and other weapons, including a well-shaped hammer and hatchet of copper, but no traces of iron.[3] The descriptions of Homer point out the era of the Iliad and the Odyssey as a bronze period; and Hesiod, as well as later writers, intimate clearly the use of bronze by the Greeks before they had learned to smelt or work the iron ore. The golden age of Saturn, and the succeeding silver, brazen, and iron ages, by which the Greek Sagas figure the gradual decline of mankind from a state of primeval purity and happiness, are not to be regarded as mere poetical images. "In the brazen age," says Schlegel, in his Philosophy of History, "crime and disorder reached their height; violence was the characteristic of the rude and gigantic Titans. Their arms were of copper, and their implements and utensils of brass or bronze. Even in their edifices copper was employed;

[1] Layard's Nineveh, vol. ii. p. 418.
[2] Natural History of Man, p. 191.
[3] Archæologia, vol. xxx. p. 248.

for as the Greek poet says, 'black iron was not then known;' a circumstance which must be considered as strictly historical, and as characteristic of the primitive nations."[1]

We have seen, in so far as the imperfect data already referred to afford trustworthy indications of the physical characteristics of the primitive colonists of Britain, that the race of the later era differed greatly from their elder and probably aboriginal precursors of the primeval period. We must depend not only on the united observations of British archæologists for adding to these ethnological data, but also on Continental research for supplying the necessary elements of comparison by which we may hope to trace out the origin of the Brachy-kephalic race of Scotland, to whom it seems probable that the introduction of the primitive metallurgic arts must be ascribed; while it may be that we shall yet be able clearly to associate the full development of these, prior to the working of iron, with the intrusion of the Celtæ upon the elder Allophylian British races.

Whencesoever the first knowledge of the metallurgic arts was derived, it introduced into the British Isles the elements of a change scarcely less momentous than those which later ages trace to letters, the magnet, the printing-press, or these latest applications of the metals—the railway and the electric telegraph. The native Briton was no longer confined to his little clearing on the coast, nor compelled with ingenious toil to fashion the shapeless flint and stone into the weapons and implements that supplied his simple wants. The forests rang with the axe and the wedge; the low grounds were gradually cleared of their primeval forests; and the fruits of patient industry were substituted, in part at least, for the spoils of the chase. Still the change was wrought, as might be anticipated, only by very slow degrees. The weapons and implements would in many localities long precede the knowledge of the arts by which they were formed. The old generation would die out, and be buried with the stone warhatchet and spear, while the younger race were learning to despise such imperfect arms. Necessity also, arising from their costliness and scarcity, would long confine the majority to the primitive and inefficient tools and weapons of their fathers. Even after the flint lance had been entirely superseded by the bronze sword and spear, the missile weapons would still be made of the old material, and the large stone hammer would be retained in use as too bulky an object to be

[1] Schlegel's Philosophy of History, Lecture II.

constructed of the more costly metal. It is probable, indeed, that stone implements were never entirely abandoned throughout the whole Bronze Period. No large bronze hammers have ever been found in Britain, while those of stone frequently occur along with metallic remains; and the larger hammers and axes, chiefly of granite, are among the most abundant of Scottish primitive relics. So recently as the month of October 1849, an ancient working of great extent was broken into at the Llandudno Copper Mines, at Ormes Head, in North Wales. In this were found a great number of stone hammers or mauls of various sizes, weighing from two to forty pounds, supposed to have been used in crushing the ore or detaching it from the rock. There also lay beside them a number of bones, and the portion of a bronze tool; affording altogether one of the most interesting discoveries yet made illustrative of the arts of the British Bronze Period.[1] Traces of ancient mining operations have also been found in Scotland. Pennant describes trenches in the Island of Jura by which the veins both of lead and copper have been wrought in very early times, and by instruments unknown to the modern miner.[2]

Abundant evidence is found in accordance with these indications, proving the existence of a long transition-period, during which metallic tools and arms were only very partially introduced, and were manifestly esteemed as rare and precious possessions. To this transition-period we should probably assign the formation of the smaller and most carefully wrought varieties of the stone hammer, with which we may presume the ingenious worker in the newly mastered metals to have wrought, and fashioned into shape, many of the rude but massive gold ornaments found in the tumuli. From the number of these relics of the precious metals which have been discovered, we are irresistibly led to the conclusion that gold must have been much more abundant at that remote era than it has been within the period of authentic history. Nor is it difficult to account for such a state of things. Though usually found in very small quantities, gold is well known as one of the most widely diffused of all the metals; and the clay slate which frequently forms the depository of gold, silver, and copper, exists in great abundance throughout the Highlands. In the Leadhills of Scotland considerable quantities of gold have been procured at no very distant period, while numerous allusions suffice to shew its greater

[1] Archæol. Journal, vol. vii. p. 68.

[2] Pennant, vol. ii. p. 250.

abundance in former times.[1] In the twelfth century the Abbey of Dunfermline received a grant from David I. of the tithe of all the gold produced by the surrounding districts of Fife and Forthrev;[2] and even in the sixteenth century the Laird of Merchiston is said to have wrought gold in the Pentland Hills.[3] In the remoter era, however, to which we now refer, when the rude Caledonian was learning, for the first time, to fashion his weapons and tools of bronze, and to substitute the golden torc and armilla for the necklace of perforated shells or stone and amber beads, we are justified in assuming from analogy that in many of the channels of the Scottish mountain streams,—amid the strata of which the ore has been found,—not only the gold dust, but pure masses of native gold would be occasionally discovered, and wrought with no better tools than the stone hammer and anvil into the personal ornaments of distinguished leaders or priests. Strabo, in referring to the great mineral wealth of Spain, which made it to the ancients what America became to the Spaniards long after their native mineral treasures were exhausted, remarks,—"In no country are gold, silver, copper, and iron, so abundant or of such fine quality; even the rivers and mountain streams bring down gold in their beds, which is found in their sands." Yet such a description is now as little applicable to Spain as to Scotland. But more recent and conclusive evidence exists. Much sensation was excited in 1795 by the discovery of gold dust in the bed of the brook Ballinasloge, a feeder of the Avonmore river, about seven miles west from Arklow, county Wicklow. The stream is formed there at the junc-

[1] "It seems our ancestors had more gold than silver, and indeed there are several places in Scotland where there has been much digging for gold. I have had the curiosity to consider the nature of them, and always found them just the same with those the Emperor has on the borders of Hungary, at two places, Nitria and Presburg. Those, like ours, consist of a vein or stratum of sand and gravel, which being brought up some fathoms from below ground, and washed, produce gold in very small particles."—Sir John Clerk to Mr. Gale, August 6, 1732; *Biblo. Topog. Brit.* vol. ii. p. 299.

In the *Miscellanea Scotica*, printed in 1710, various notices of the ancient working of gold in Scotland occur. Pieces of gold, mixed with spar and other substances, weighing thirty ounces, are described among the fruits of the Laughain and Phinland mines. See also Pennant's Tour, App. x. vol. iii. for a curious account "of the gold mines of Scotland."

The introduction of the metals into southern Europe in ancient times appears to have borne no analogy to that in the north. Gold was not used in the Roman coinage till B.C. 207, sixty-two years after the adoption of a silver coinage. So, too, in the records of sacred history, Abraham weighed unto Ephron 400 shekels of silver, current money with the merchant. The earliest notice of gold used otherwise than for jewels and ornaments only occurs in the reign of David, when he purchased the threshing-floor of Ornan for 600 shekels of gold by weight; 1 Chron. xxi. 25. Compare this with 2 Samuel xxiv. 24.

[2] Regist. de Dunferm. p. 16.

[3] Miscel. Scot., Napier of Merchiston, p. 228.

tion of three ravines; and in this spot John Lloyd, Esq., F.R.S., a correspondent of Sir Joseph Banks,[1] describes upwards of three hundred women, besides men and children, all engaged at one time in searching for the precious metal:—a scene not difficult to parallel in our own day. The searchers, however, were abundantly rewarded for their labour. The gold was found in masses varying from a few grains to five ounces in weight, and one piece, weighing twenty-two ounces, was reserved as a present to His Majesty. A later correspondent,[2] in a communication to the Royal Society, calculates that 800 ounces of gold were collected in the short space of six weeks, at the end of which time the gatherers were dispersed by a body of militia, and the gold area held for behoof of Government. "The gold," says Mr. Mills, "is of a bright yellow colour, perfectly malleable; the specific gravity of an apparently clean piece 19,000. A specimen, assayed here in the moist way, produced from 24 grains $22\frac{58}{101}$ grains of pure gold, and $1\frac{43}{101}$ of silver. Some of the gold is intimately blended with, and adherent to quartz; some, it is said, was found united to the fine grained iron-stone, but the major part was entirely free from the matrix; every piece more or less rounded on the edges, of various weights, forms, and sizes."[3] Specimens were afterwards assayed by the Royal Mint Master at the Tower of London. One piece contained, in 24 carats, $21\frac{5}{8}$ of fine gold, $1\frac{7}{8}$ of fine silver, and $\frac{3}{8}$ of alloy, which seemed to be copper tinged with a little iron.[4]

Such an example may be reasonably received as supplying one satisfactory clue to the sources of the gold which we find to have been so abundant in early times; though we shall still, perhaps, consistently account for the introduction of some portion of it indirectly by foreign barter, and chiefly in the shape of the ring-money hereafter referred to. But when the fact is borne in remembrance that articles of silver are rarely, if ever, found in connexion with relics of the Bronze Period, it must be acknowledged as most consistent with the geological and mineralogical characteristics of auriferous and argentiferous deposits to look to native sources for the supply of gold. While silver is found only in large quantities by mining, gold has invariably been discovered in largest quantities in the superficial detritus, and accumulated in circumscribed areas. Whenever, therefore, we are enabled to trace

[1] "Account of the late discovery of native gold in Ireland." Philosoph. Transac. London, 1796, p. 34.

[2] Ibid. p. 38. "A Mineralogical Account of the native gold lately discovered in Ireland," by Abraham Mills, Esq.

[3] Philosoph. Transac. London, 1796, p. 43.

[4] Ibid. p. 45.

the supply of gold to a foreign, as, for example, to a Phœnician source, we can hardly fail to find accompanying relics of silver; and accordingly, in the succeeding, or Iron Period, the gold becomes of rare occurrence, and the silver abundant. One other argument should not be altogether overlooked. The great purity of very many of the gold ornaments found in the tumuli is such as may perhaps add to the probability of its native origin. This well-known fact has frequently supplied an additional inducement to transfer to the crucible many of the rarest and most valuable relics of this period. Others found alloyed with silver are in no fixed or uniform proportions, but rather in accordance with the accidental mixtures likely to occur in the operations of the primitive miner and metallurgist. But this, though diminishing their bullion value, has not sufficed to save such national heirlooms from destruction. After reposing in the safe muniment chambers of their original owners, with but a foot of earth above them, while ancient races have become extinct and new colonists have risen to mighty nations above their forgotten graves, these treasures have only been restored to light to be immediately destroyed. The barbarity of such proceedings has hardly yet been fully exposed. It is the destruction of national records in the meanest spirit of cupidity, which no wealth could restore, and for which not even the poor excuse can be found that satisfied the fanatic Caliph Omar when he converted the treasures of the Alexandrian Library into fuel for the city baths.

Remote as is the period when the novel arts of the metallurgist broke in upon the simple and unsophisticated habits of the British aborigines, some traces of the memory of this mighty change still linger amid the popular traditions of England. The use which Sir Walter Scott has made of the Berkshire legend of Wayland Smith has sufficed to confer a fictitious interest on, perhaps without exception, the most remarkable of all the mythic traditions common to the nations of northern Europe, and which may be unhesitatingly received as the traditionary memorial of the advent of the Bronze Period among the Teutonic races. True, indeed, in the only definite form in which it is now recoverable from the early and medieval literature of Europe, it is associated with the later age of iron rather than with that of bronze; but little importance can be attached to this. The legend is manifestly of an older date even than the Edda, that venerable collection of the sacred writings of the north. We see in it the hero-

worship of the fierce Norsemen deifying their Scandinavian Vulcan, and assigning to him a superhuman origin as an evidence of their estimate of the divine gift he is supposed to have bestowed. But the mythic legend finds its prototype in the Greek Dædalus, if not in the Mosaic Tubal-Cain. It is incorporated into nearly all the older European tongues with singular uniformity of idea. In the Icelandic the name of the renowned northern metallurgist is Vælund and Vaulundr; in old high German, Wiolant, Wielant; in Anglo-Saxon, Wêland; in old English, Weland and Velond; and in the modern popular dialect, Wayland. In the Latin of the middle ages it becomes Guielandus; and in old French, Galans and Galant. It is probable that Spain, Italy, and the East above all, had analogous traditions, some of which at least may yet be recovered.[1] According to a singular, and seemingly arbitrary caprice of the medieval Germanic traditions, the forge of Weland is supposed to be erected in the Caucasus; and Michel remarks, as a proof that there has been a common origin of these legends of the east and west relating to skilful workers in iron, that some of the traditions still preserved on the banks of the Euphrates present the same traits recorded by the poets of the middle ages on the banks of the Rhine.[2] But Humboldt has justly remarked that "the characteristic features of nations, like the internal construction of plants spread over the surface of the globe, were the impressions of a primitive type." The Aztecks,—to whom we have already referred as a remarkable example of considerable civilisation, and the extensive practice of many useful and ornamental arts, among a people destitute of iron and very partially furnished with metals,—had their mythic metallurgist as well as the older races of Europe and Asia. Quetzalcoath, whose reign was the golden age of the people of Anahuac, was the Weland of the Aztecks, worshipped among them with strange and bloody rites. Their traditions told that he had dwelt among them twenty years, and had taught them to cast metals, ordered fasts, and regulated the intercalations of the Tolteck year.[3] Prominent as the place is which the mythic legend of the smith-god occupied in the popular creed of the middle ages throughout the greater part of Europe, the tradition of a gifted worker in metals is doubtless of eastern origin, and far more fitly impersonates and deifies the restoration of the metallurgic arts in the primitive Bronze Period

[1] Wayland Smith, by W. S. Singer, from the French of Depping and Michel, Preface.

[2] Ibid. p. lxxvi.

[3] Humboldt's Researches, vol. i. p. 94.

than the mere transition from bronze to iron, important as the latter change undoubtedly was.

The remarkable analogy of the mythic legends of the North with the ancient Greek fable of Dædalus, has not escaped the notice of modern critics, and MM. Depping and Michel remark :—"We do not hesitate to believe that it is the history of this Greek artist, altered and disfigured, adapted to the manners and creeds of the people of the north of Europe, which has given rise to the romance of Weland." The resemblance, however, is scarcely less manifest, in many respects, to the lame smith-god Ἥφαιστος, or Vulcan; and the widely-diffused mythic fable is far too complete and unique to have been transferred directly from the Greek to the Teutonic mythology, where scarce another trace of similar correspondence is discernible. Jupiter, Mars, Hercules, Venus, Orpheus, all find their counterparts indeed, but with scarce a shadow of resemblance to Greek prototypes, in the wild Scandinavian and old German pantheon, which may reasonably excite our wonder, if we assume a Greek origin for the *Vœlundar Quida* contained in the Edda. In the simplest form in which it is still recoverable, it is obviously overlaid with spurious additions of a later age; and when it gets into the monkish chronicles and romances of chivalry compiled in the twelfth and thirteenth centuries, the wild faith of the Norsemen is outdone by the wilder fictions of the Trouveres, and nearly all the symbolic spirit of the original disappears. Some of these even assign precise periods as the era of the northern smith. Several of the French romances mention Galand as the maker of Charlemagne's famous sword Durendal, while others describe armour forged by him and weapons inscribed with his name. But the most curious notice of this kind occurs in an English manuscript written about the time of Edward I. It contains a description of the sword of Gauvain, one of the most celebrated knights of Arthur's "Round Table," made by Galant, and having the following lines inscribed in *canello gladii* :—

"Jeo su forth trenchant, e dure;
Galaan me fyth par mult grant cure;
Catorse anz [out] Jhesu Cristh,
Quant Galaan me trempa e fyth;"

i. e., "I am very sharp and hard; Galaan made me with very great care; fourteen years old was Jesus Christ when Galaan tempered and made me." Other romances furnish with swords of Galant's

workmanship both Julius Cæsar and Alexander the Great, and by inheritance from the latter, Ptolemy, Judas Maccabæus, and the Emperor Vespasian.[1] Such spurious inventions, however, lack all the value of the original symbolic legend. We read indeed in the romance of Fierabras d'Mixandre, of three famous swords made by Galans and his two brothers; of one of which it is related,—

> "Césars li emperères l'ot maint jor en demagne,
> Engleterre en conquist, Angou et Alemagne,
> Et France et Normendie, Saisone et Aquitaigne,
> Et Puille et Hungerie, Provence et Moriaigne."[2]

If this idea stood alone, or was conceived in the simple spirit of the Scandinavian Vœlund-Chaunt, we might imagine it to be designed as a symbolic myth representing the advent of the Iron Period, and its irresistible progress over the north; but the general spirit of the romance is characterized by the usual extravagance of medieval poetry.

The Greeks assigned to the history of Dædalus a very high antiquity, carrying him back to somewhere about the thirteenth century before the Christian era; but it may admit of doubt if Greece had then passed her own primitive stage. Among the relics of the European Stone Period preserved in the Museum of the Scottish Antiquaries are some small flint-flakes and arrow-heads, gathered on the elevated mound of the tomb of the Plateans at Marathon, which it will not greatly outrage the ideas of the critical historian to assume as weapons used by the Greek patriots in repelling the Persian invader. At first the word Dædalus was, among the Greeks, like that of Weland among the Scandinavians, a generic name. *Δαιδαλλω* signified to work artistically, as *Voelundr* signified a smith in Islandic; and Dædalus was, like Weland, pre-eminently the artist and the workman. The word became a proper name only because of their attributing to this mythological being all the perfections of the art. For this reason also, it appears equally erroneous to regard the Islandic word *voelund*, a smith, as derived from Weland: it is the contrary that should be assumed. The word *voelund* existed before the history of the famous smith Weland had been invented, just as the word *δαιδαλλω* existed before the personification Dædalus had been adopted into the mythology of the Greeks.[3] This is no new idea. It was obvi-

[1] Archæologia, vol. xxxii. p. 321.

[2] MS. de la Bibl. Roy. Supplem. Française, No. 540, fol. 33. Singer's Wayland Smith, p. lvii.

[3] Singer's Wayland Smith, p. lxx.

ously from a recognition of it that King Alfred, when translating the *De Consolatione Philosophiæ* of Boethius into Anglo-Saxon, used the name of the northern Weland as synonymous with *Fabricius*. Mr. Singer has employed the Greek fable of Dædalus to restore the connexion of the arts of the north with the elder civilisation of Europe, and Dr. Sickler has applied the same classic legend with great ingenuity in his argument of the Phœnician origin of the Greek metallurgic arts.[1] Whencesoever that knowledge may have been immediately derived, we shall adopt the most consistent idea if we turn back to the Eastern cradle-land both of the Hellenic and Scandinavian races, and assume a common origin for the mythic fable which records with corresponding symbolic legends the restoration of the art of Tubal-Cain to the postdiluvian race.

It is a remarkable and interesting fact, that while modern learning and research have brought to light the most ancient literate forms of this northern myth, in the Edda and the Niebelungen Lied, it is in England only that it has survived to our own day as a living popular tradition; and it is due to the somewhat grotesque travesty of its rude Berkshire version inwrought into the tragic tale of Kenilworth, that it has been restored to the favour of modern Europe. Among the old Scandinavian nations, and in Iceland, where the language of their runic literature is still a living tongue, as well as in France, and throughout the whole Germanic races of the Continent, all memory of the restoration of this divine gift of the metals has utterly passed away. In England only—towards which we see the galleys of the elder inheritors of civilisation winging their way in quest of its metallic treasures with the first glimpse we catch of it as it emerges out of the night of time—the mythic legend has retained vitality till now. How the story of our northern Dædalus came to be associated with the monolithic group at the foot of White-Horse Hill, in the vale of Berkshire, it is now equally vain and useless to inquire. There, according to rustic folk-lore, dwelt the invisible smith. No one ever saw him; but he who had the courage to avail himself of his skill had only to deposit a piece of money on one of the stones, and leave his horse beside it. On his return the horse was found to be shod, and the money gone. Such was the last shadowy tradition of the venerable myth. On one of the rarer coins of Cunobeline an armourer or coiner is represented. Some numismatists have supposed it to be Vulcan forging a helmet.

[1] *Die Hieroglyphen in dem Mythus des Æsculapius.* Meiningen, 1819. Singer, p. lxx.

May it not more probably be assumed as the northern Weland, whose metallurgic skill was so widely celebrated among the Teutonic nations? Before the great Alfred had won his way to the English throne the symbolic impersonation had assumed a perfect individuality; and in the translation of the *De Consolatione Philosophiæ* into Anglo-Saxon, he thus paraphrases the passage,—Ubi nunc fidelis ossa Fabricii manent? Quid Brutus, aut rigidus Cato?

"Where are now the bones
Of the wise Weland,
The goldsmith
Formerly most famous?
* * * *
Who knows now the bones
Of the wise Weland,
Under what mound (or barrow)
They are concealed?"[1]

If little importance be due to the association of Weland's name with the working in iron, not very much more is to be ascribed to the no less frequent depiction of him as a cunning jeweller and goldsmith. Nevertheless, the circumstance is worthy of notice in passing, since it is not impossible that the working in gold may have preceded even the age of bronze, and in reality have belonged, as already hinted, to the Stone Period. If metal could be found capable of being wrought and fashioned without smelting or moulding, its use was perfectly compatible with the simple arts of the Stone Period. Of such use masses of native gold, such as have been often found both in the Old and the New World, are peculiarly susceptible; and some of the examples of Scottish gold personal ornaments fully correspond with the probable results of such an anticipatory use of the metals. One very remarkable example, more particularly referred to hereafter, occurs in a pair of armillæ of pure gold, found in an urn of the rudest and most artless construction in a cist in Banffshire. They are merely hammered into rounded bars and then bent to fit the arm, and they retain the rough marks of the tool, which it is more easy to imagine one of stone than any more delicate or artificial implement. It is not impossible that it may be owing to some faint traditional remembrance of this primitive origin of the working of metals, that the oldest notices of

[1] *Vide* Thomas Wright on the Legend of Weland the Smith. *Archæologia*, vol. xxxii. p. 315. Also his article on Alfred, in the *Biographia Literaria* of the Royal Society of Literature regarding the authorship of this metrical version.

Weland represent him chiefly as the cunning goldsmith, as in the fifth stanza of the Vœlundar Quida of the Edda:—

> "Vœlund alone remained in Ulfdale,
> He wrought red gold, with jewells rare,
> Securing on a withy rings many."

So it is in all the earliest existing forms of this ancient myth, the working in iron is only superadded to the skill of the famous goldsmith.

No Celtic legend preserves an equally distinct memorial of the introduction of the metallurgic arts among the ancient colonists of the British Isles. Nevertheless the Scottish Highlanders have their native Ἥφαιστος also, personified, like the Teutonic Weland, in many romantic legends. The fame of Luno, the son of Leven, who made the swords of Fingal and his heroes, is preserved in old traditional poems, which figure him as a wild savage clad in a mantle of black hide, and with an apron of similar materials. The additional features of the picture furnish no inapt personification of the classic Vulcan. He is described as lame; going on one leg, with a staff in his hand, yet remarkable for his swiftness.[1] Dr. Macculloch, in demonstrating the affinity between the Celtic and Teutonic superstitions and the Oriental and classic mythology, remarks,—"Fingal is not an absolute original himself. His sword is the sword of sharpness of the Edda, made by Velent or Weyland, the hyperborean Vulcan. It is the wonderful sword Skoffnung, and also Balmung, and it is the Mimmung in Ettin Langshanks. It is equally Tyrsing, the fairy blade of Suafurlami; and it is also the sword which Jack begged of the giant. It is the sword Durandal, with which Orlando cuts rocks in two; and it is Escalibor, the sword of Arthur."[2] Thus common as the metal from which it is forged is some form or other of the mythic legend which commemorates the restoration of old Tubal-Cain's weapon of war. Still the venerable Teutonic myth does not appear to have been preserved by the Scottish medieval chroniclers or romancers, unless in some extremely modified form, or it could hardly have escaped the notice of Dunbar, in his satire of "The Fenyeit Freir of Tungland." The incident which gave rise to this whimsical effusion of our great Scottish poet against the Italian charlatan occurred in 1507, (a year famous for the introduction of the printing-

[1] Logan's Scottish Gael, vol. ii. p. 195.

[2] Macculloch's Highlands and Western Isles of Scotland, vol. iv. p. 327.

press into Scotland,) and is thus described by Bishop Lesley.[1] Referring to an embassy sent to France in that year, he remarks,—"This tyme thair wes ane Italiane with the king, quha wes maid Abbott of Tungland, and wes of curious ingyne. He causet the king believe that he, be multiplyinge and utheris his inventions, wold make fine golde of uther mettall, quhilk science he callit the quintassence; quhairupon the king maid greit cost, bot all in vaine. This Abbott tuik in hand to flie with wingis, and to be in Fraunce befoir the saidis ambassadouris; and to that effect he causet mak ane pair of wingis of fedderis, quhilkis beand fessinit apoun him, he flew of the Castell wall of Striveling, bot shortlie he fell to the ground and brak his thee bane. Bot the wyt thairof he ascryvit to that thair was sum hen fedderis in the wingis, quhilk yarnit and covet the mydding and not the skyis." The Scottish historian compares him to "ane king of Yngland callit Bladud." The poet's similes are still more pertinent; though since we learn from the Scottish Treasurers' Accounts, that the Abbot of Tungland was paid, in 1513, "to pass to the myne of Crawfurd-moor," which the king was then working for gold: and from the satire, that he sometimes practised the Blacksmith's craft: Dunbar could scarcely have avoided the addition of the Weland legend to his other similes, had it been known to him, since the points of resemblance are such, that, with less historic evidence for the truth of the Abbot's history, we might assume it as the rude Scottish version of the Vœlundar Quida:—

"Sum held he had bene Dedalus,
Sum the Mynataur mervaluss,
Sum Mertis blak smyth Vulcanus,
And sum Saturnus cuk.
And evir the cuchettis at him tuggit,
The rukis him rent, the ravynis him druggit,
The huddit crawis his hair furth ruggit,
The hevin he micht nocht bruke."

[1] Bishop Lesley's Hist. Bannatyne Club. 4to. Edinburgh, 1830. P. 76.

CHAPTER II.

THE METALLURGIC TRANSITION.

In the earliest glimpse we are able to catch of the British Isles with the dawning light of historic records, we learn of them as already celebrated for their mineral wealth. So long, however, as Britain retained its vast tracts of natural forests, and was only occupied by thinly scattered nomade tribes, the tin mines of Cornwall, and the foreign trade which they invited to the southern shores of the island, might reward the toil and sagacity of the ancient Cornubii or other primitive colonists of Cornwall and the Scilly Isles, without exercising any perceptible influence on neighbouring tribes, or being known to the remoter dwellers beyond the Solway and the Tyne. The spoils of war, more probably than any peaceful interchange of commodities, would first introduce the bronze weapons imported into Cornwall to the knowledge of the northern tribes. But the superiority of the sword and spear of metal over the old lance of flint or bone would speedily be appreciated, and we accordingly find abundant traces of one of the first elements of civilisation, viz., an interchange of commodities and the importation of foreign manufactures, having accompanied the advent of the Bronze Period. The rude aboriginal Briton no longer confined his aim in the chase to the supply of his own table and simple wardrobe. The Phœnicians traded to Britain for its furs as well as its metals, and for these the products of a wider district than the tin country would be required. The Caledonian hunter would learn to hoard up the skins won in the chase, to barter with them for the coveted sword and spear of bronze,—and thus the first

elements of civilisation would precede the direct knowledge of the metallurgic arts.

The advent of the Bronze Period, however, cannot be held to have been fairly introduced until the native Caledonian had learned, at least to melt the metals, and to mould the weapons and implements which he used, if not to quarry and smelt the ores which abound in his native hills. The progress consequent on the indirect introduction of the metals would speedily create new wants and the desire for modifications and improvements on the implements of foreign manufacture. The demands on his sagacity and skill would increase with the gradual progress in intelligence and civilisation consequent on the new impulses brought into operation; and thus would the arts of the smith and the jeweller be superinduced on the originally barbarian devices of the Caledonian. Once introduced, by whatever means, he was not slow to improve on the lessons furnished in the novel art; and while, with a pertinacious adherence to ancient models singularly characteristic of primitive races, we find implements and personal ornaments of the modern Scottish Highlander not greatly differing from those of fully ten centuries ago, we also find the natives of isolated districts, beyond the reach of changing influences, practising the ingenious arts of this remote period when every man was his own armourer and goldsmith.

It needs not either the authority of revelation, or the demonstrations of ethnology, to prove that God has made of one blood all that dwell upon the earth. Man, placed under the same conditions, everywhere exhibits similar results. The ancient Stone Period of Assyria and Egypt resembles that of its European successor, and that again finds a nearly complete parallel in the primitive remains of the valley of the Mississippi, and in the modern arts of the barbarous Polynesians. So, too, with the higher state which succeeds this. The characteristics of the early Bronze Period are long since familiar to us. Milton, who accords equally stinted honours to Mulciber and to Mammon, by whose suggestion taught, men

> "Ransack'd the centre, and with impious hands
> Rifled the bowels of their mother earth
> For treasures better hid,"—

refers to the introduction of the metallurgic arts as first among those great sources of change which the Archangel Michael makes known to Adam when exhibiting to him the future destiny of his seed. The

knowledge of working in metals is there also introduced in contrast to the simpler arts of the pastoral state, and as the chief source of social progress with all its accompanying development of luxury and crime. On one side Adam sees the shepherds' huts and grazing herds;

> "In other part stood one who, at the forge
> Labouring, two massy clods of iron and brass
> Had melted, (whether found where casual fire
> Had wasted woods on mountain or in vale,
> Down to the veins of earth; thence gliding hot
> To some cave's mouth; or whether washed by stream
> From under ground,) the liquid ore he drained
> Into fit moulds prepared, from which he formed
> First his own tools, then what might else be wrought
> Fusil, or graven in metal."

Amid the highly artificial results of modern civilisation we might find some difficulty in conceiving of such a social state, in which considerable taste and ingenuity were displayed in the forging of arms and tools, and in the manufacture of personal ornaments. But not only are we able to compare the results of the division of labour with the fruits of such isolated skill, in races only now beginning to develop these first elements of civilisation; we can also look upon the living representatives of the Caledonian at the dawn of his historic era. Dr. Layard, in describing a visit to an ancient copper mine in the Tiyari Mountains, remarks,—"In these mountains, particularly in the heights above Lizan, and in the valley of Berwari, mines of iron, lead, copper, and other minerals, abound. Both the Kurds and the Chaldæans make their own weapons and implements of agriculture, and cast bullets for their rifles—collecting the ores which are scattered on the declivities, or brought down by the torrents."[1] This affords a parallel modern picture of such a state of society as that we have to conceive of in the early dawn of the British Bronze Period. Martin, in his description of the Western Isles, written at the commencement of the eighteenth century, remarks of the islanders,—"When they travel on foot the plaid is tied on the breast with a bodkin of bone or wood, just as the spina worn by the Germans, according to the description of Tacitus." He then furnishes a detailed account of the ancient dress, even then becoming rare, and of the breast-buckle or brooch, of silver or brass, which appears to have formed, from the very earliest times, the most

[1] Nineveh and its Remains, vol. i. p. 224.

favourite personal ornament of both sexes. "I have seen some of the former," says he, "of an hundred marks value: it was broad as any ordinary pewter plate, the whole curiously engraven with various animals, &c. There was a lesser buckle, which was worn in the middle of the larger, and about two ounces weight. It had in the centre a large piece of crystal, or some finer stone, and this was set all round with several stones of a lesser size."[1] The Rev. John Lane Buchanan, visiting these islands nearly a century later, found the same customs unchanged, and the primitive metallurgic arts of the ingenious Hebrideans not greatly in advance of the modern Asiatic Kurds. This writer remarks of the females,—"All of them wear a small plaid, a yard broad, called *guilechan,* about their shoulders, fastened by a large brooch. The brooches are generally round, and of silver, if the wearer be in tolerable circumstances; if poor, the brooches, being either circular or triangular, are of baser metal and modern date. The first kind has been worn time immemorial even by the ladies. The married women bind up their hair with a large pin into a knot on the crown of their heads."[2] The same writer thus describes the practice of every necessary art and trade by the simple islanders:—"It is very common to find men who are tailors, shoemakers, stocking-weavers, coopers, carpenters, and sawyers of timber. Some of them employ the plane, the saw, the adze, the wimble, and they even groove the deals for chests. They make hooks for fishing, cast metal buckles, brooches, and rings for their favourite females."[3] They were, in fact, at that very recent period practising nearly the same arts as we may trace out at a time when the Phœnician traders were still seeking the harbours of Cornwall, and exchanging the manufactures of Carthage, and perhaps of Tyre, for the products of the English mines. A no less unquestionable proof of the unchanging character of the Celtic arts is to be found in the fact that the ornamentation, not only on many of the old Highland brooches and drinking horns, but invariably employed in decorating the handle of the Highland dirk and knife, down to the last fatal struggle of the clans on Culloden Moor which

[1] Martin's Western Isles. Lond. 1703, p. 208. The Glenlyon brooch and the brooch of Lorn—worn according to the tradition of the Macdougals, by Robert the Bruce, and still preserved in that family—beautiful examples of this favourite Celtic ornament, are engraved on Plates II. and III. The Lorn brooch corresponds in some degree to the description in the text; and a common brass one, probably of the seventeenth century, in the Collection of C. K. Sharpe, Esq., figured on a later page, furnishes a good example of native Celtic art.

[2] Travels in the Western Hebrides from 1782 to 1790. London, 1793, p. 87.

[3] Ibid. p. 88.

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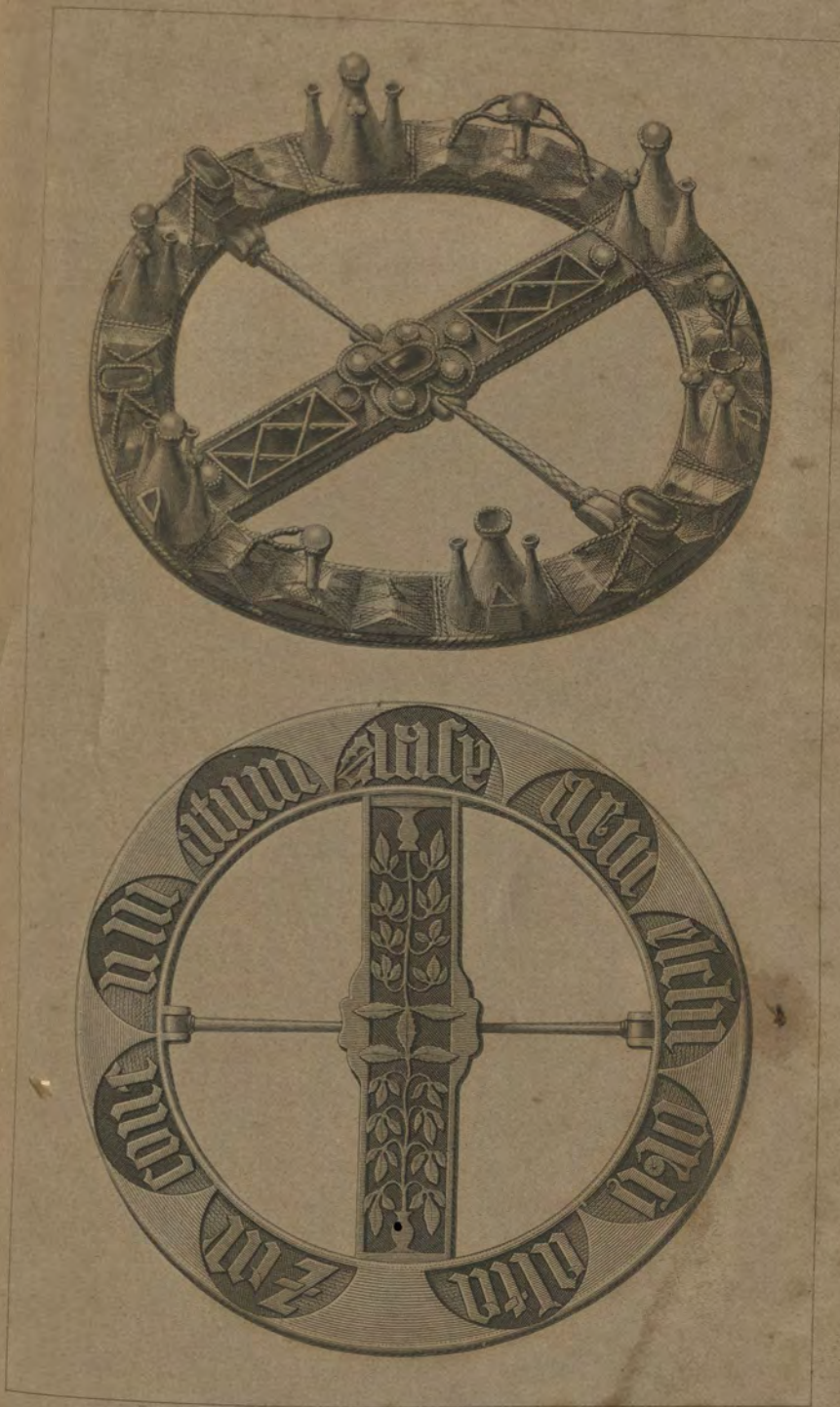


Engraved by Wm. Douglas, from Drawings in possession of the Soc. Antiq. Scot.

THE GLENLYON BROOCH.

abruptly closed the tradition of many centuries, is exactly the same interlaced knot-work which we are familiar with on the most ancient class of sculptured standing stones in Scotland. The annexed figure of a Highland powder-horn of the seventeenth century is from one in

the possession of Mr. James Drummond, bearing inscribed on it the initials and date, G. R. 1685. The triple knot, so common on early Scottish and Irish relics that it has been supposed to have been used as a symbol of the Trinity, is no less frequently introduced on the Highland targets and brooches of last century, and is shewn along with other interlaced ornaments, on an example of the latter introduced in a subsequent chapter.

On the theory of the introduction of metallurgic arts assumed here, not altogether without evidence, it is not requisite that we should conceive of the aboriginal Caledonians disturbed by the invasion of foreign tribes armed with weapons scarcely less strange to them than those with which the Spanish discoverers astonished the simple natives of the New World. The changes, however, already noted in the forms and modes of sepulture, the abandonment of the long barrow, the introduction of cremation, of the sitting or folded posture of the dead with the correspondingly abbreviated cist, and of a uniform and defined direction of laying the dead, are all suggestive of the probable intrusion of new races in earlier as well as in later times. The facilities afforded by the more pliable metal tools would speedily work no less remarkable changes on the mansions of the living than on the sepulchres of the dead. The subterranean weem would give place to the wooden structure, which the new arts rendered at once a more convenient and simpler style of architecture; while the inroads on the forests which such changes led to would necessitate the clearing of the neighbouring lands preparatory to the extended labours of the agriculturist. To the same cause also we

may probably trace the origin of many of those extensive tracts of bog and peat-moss which still encumber the limited level areas of Scotland. The wasteful profusion of the natives of a thinly peopled country would lead to the destruction of the forests with little heed to aught but the supply of their own immediate wants. In the extensive mosses of Kincardine and Blair-Drummond, which have yielded such valuable archæological relics, when the surface of the underlying clay was exposed by the removal of the moss, it was in many places covered with trees, chiefly oak and birch, of a great size. These were found lying in all directions beside their roots, which continued firm in the ground in their natural position; and from impressions still visible it was evident that they had been cut with an axe or some similar instrument.[1] The like discoveries in other Scottish mosses prove their origin from the same wasteful inroads of early times.

The occupants of the country at this period were necessarily isolated tribes and clans, with no common interest, and little peaceful intercourse. The arts were therefore practised as in their primeval dawn described by Milton, when the artist formed

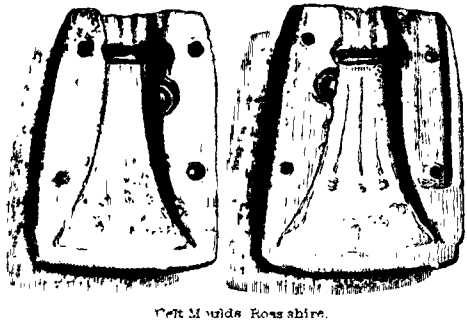
"First his own tools, then what might else be wrought."

Among all the varied primitive relics which have been from time to time discovered, both in Scotland and other countries of northern Europe, none exceed in interest the stone and bronze moulds in which the earliest tools and weapons of the native metallurgist were formed. They have been found in Scotland, England, Ireland, and in the Channel Islands, exhibiting much diversity of form, and various degrees of ingenuity and fitness for the purpose in view. Some of them are of bronze, and highly finished, examples of which from the British Museum are engraved in the Archæological Journal, (vol. iv. p. 336,) in *Plate* VII. vol. v. of the Archæologia, and elsewhere. If the account, however, furnished by Warburton to Stukely may be relied upon, such objects are by no means rare. According to him, a bushel of celts, each inclosed in a brass mould or case, was found in 1719, at Brough, in the Humber. Mr. Worsaae refers to another example of a number of bronzes found in Mecklenburg, accompanied by the moulds in which they were cast, together with pieces of unwrought metal; and similar bronze celt-moulds have been discovered at various times in different parts of France. In the Museum

[1] Kincardine Moss. General Append. Sinclair's Stat. Acc. vol. xxi. p. 154.

of the Society of Antiquaries of Scotland there are casts of a pair of large and very perfect bronze celt-moulds, of unusual size and peculiar form, found at Theville, Arrondissement de Cherbourg.

But still more interesting are the ruder stone moulds, in some of which we may trace the first efforts of the aborigines of the Stone Period to adapt the materials with which they were familar to the novel arts of the metallurgist. This is particularly observable in a mould-stone preserved in the Belfast Museum. It is polygonal in form, and exhibits upon four of its surfaces indented moulds for axe-heads of the simplest class. In this example there is no reason to believe that any corresponding half was used to complete the mould. The melted metal was simply poured into the indented surface, and left to take shape by its equilibrium on the exposed surface. Weapons formed in this way may frequently be detected, while others, full of air-holes, and roughly granulated on the surface, appear to have been made in the still simpler mould formed by an indentation in sand. Others of the stone moulds have consisted of pairs, like those of bronze. A very curious example of this description was found a few years since in the Isle of Anglesea, and is engraved in the Archæological Journal.[1] It is a cube of hone-stone, nine inches and a quarter in length, by four inches in breadth at its widest extremity. Each of the four sides is indented for casting different weapons: two varieties of spear, a lance or arrow-head, and a celt with two loops. Only the one stone was found, but another corresponding one is obviously requisite, by means of which four complete moulds would be obtained.

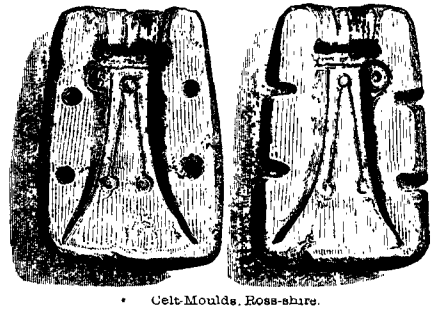


Celt Moulds Ross-shire.

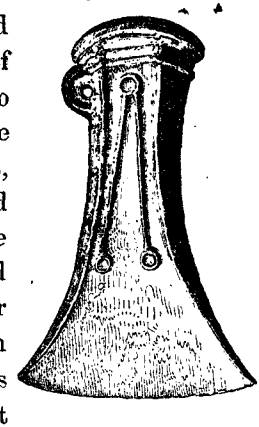
At the Congress of the Archæological Institute, held at Salisbury in 1849, the temporary Museum contained a mould of serpentine, found in Dorsetshire, designed for casting spear-heads, and another of granite, found near Amesbury in Wiltshire, intended to cast ornamented celts of two sizes. Of the same class are two pairs of celt-moulds recently discovered in the parish of Rosskeen, Ross-shire. The site of this interest-

[1] Archæol. Jour. vol. iii. p. 257.

ing discovery is about four miles inland, on the north side of the Cromarty Frith, on a moor which the proprietor is reclaiming from the wild waste, and restoring once more to the profitable service of man. In the progress of this good work abundant evidence demonstrated the fact, that the same area from which the accumulated vegetable moss of many centuries is now being removed, had formed the scene of a busy, intelligent, and industrious population ere the first growth of this barren produce indicated its abandonment to solitude and sterility. Near to the spot where the moulds were discovered there stood till recently a large sepulchral cairn; and in forming a road through the moss several cists were exposed containing human bones and cinerary urns. Amid these evidences of ancient population the two pairs of moulds were discovered, at a depth of only sixteen inches from the surface. They are very perfect, and are composed of a hard and very close-grained stone. One pair is notched and perforated through both moulds, so as to admit of their being exactly fitted and tied together for casting. Close to the spot where they were discovered there was also disclosed the remains of a rude inclosure or building of stone, containing a bed of ashes and scoriæ; so that here no doubt had been the forge of the primitive metallurgist, from whence, perhaps, the natives of an extensive district obtained their chief supplies of weapons and tools. These Scottish moulds give evidence both of taste and ingenuity. In one of them is also a matrix for forming a smaller implement, the use of which is not easy to determine, while both the celts are large and elegant in form. The woodcut represents one of the celts cast from the mould, which measures fully five inches long.



Celt-Moulds, Ross-shire.



In most cases, however, it may be assumed that the earliest weapons of metal were furnished, as the modern sportsman casts his

bullets, by each warrior or craftsman becoming his own smith and founder; and when we consider the slow and tedious process indispensable for the completion of the stone hammer or lance-head of flint, we may readily perceive that it would be from the scarcity of the metals and not from any preference for primitive and more familiar arts, that the Briton of the transition-period continued to use the weapons of his fathers, or intermingled them with the more efficient ones which the new art supplied. Still it was probably long before he overcame the difficulty of casting metal in metal, and learned to model and cast his mould instead of laboriously cutting it from stone.

In these, as in other stages of improvement, we detect, as it were, the old tide-marks in the progress of civilisation. The rude chip-axe improves into the highly polished wedge and celt; this in its turn gives way to the rude sand-cast axe, or to the similar weapon moulded in the indented stone. The celt and spear-head follow, gracefully formed and looped in the double mould of stone or bronze. The taste of the more experienced metallurgist also finds room for the exercise of the decorative arts, and transfers to the bronze implements the incised and chevron patterns which were first introduced on his vessels of unbaked clay. Still further evidences of progress will come under our notice, showing the extent to which civilisation had advanced before the late and more familiar metal superseded the works of bronze.

In the romantic outskirts of the old Scottish capital some of the most remarkable evidences of the abundant remains of this era have been discovered. Reference has been made in a former chapter to the finding of stone cists and cinerary urns as the modern city extended over the suburban fields which lay beyond the old North Loch. Towards the close of the eighteenth century, when the spirit of agricultural improvement, which has been productive of such important results to Scotland, was beginning to take effect, the use of marl as a valuable manure was advocated and practised with a zeal no less wide spread and enthusiastic than has resulted in our own day from the discovery of the Guano Islands of the Pacific. One of the most zealous of these Scottish agriculturists was Sir Alexander Dick of Prestonfield, whose estate is bounded on the north by the romantic Duddingstone Loch, which there separates it from the ancient royal demesne of Holyrood Palace. In 1775 he constructed a canal, and prepared a couple of flat-bottomed boats, with the requisite dredging machinery attached to them. These were set afloat on the loch, and

their projector thus describes some of the most interesting results of his labours in a letter communicated to the Earl of Buchan, the founder of the Society of Antiquaries of Scotland, shortly after its institution in 1780.

"In the third year of my progress in dragging successfully great quantities of marl, now and then in the middle of the lake I met with large fragments of deer's horns of an uncommon magnitude. As my operations were proceeding northward, about one hundred and fifty yards from the verge of the lake next the King's Park, the people employed in dredging in places deeper than usual, after having removed the first surfaces of fat blackish mould, got into a bed of shell marl from five to seven feet deep, from which they brought up in the collecting leather bag a very weighty substance, which when examined as it was thrown into the marl boat, was a heap of swords, spears, and other lumps of brass, mixed with the purest of the shell marl. Some of the lumps of brass seemed as if half melted; and my conjecture is that there had been upon the side of the hill, near the lake, some manufactory for brass arms of the several kinds for which there was a demand."[1]

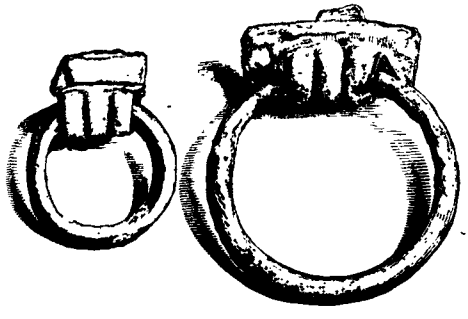
Rarely has a more interesting discovery been made, or one on an equally extensive scale, illustrative of the Scottish Bronze Period. Some of the most perfect and beautiful of these ancient weapons were presented to His Majesty George III.; others, doubtless also among the best specimens, were retained as family heirlooms, some of which were afterwards given to Sir Walter Scott;[2] but the remainder, including upwards of fifty pieces of swords, spear-heads, and fragments of other weapons, most of them more or less affected by fire, were presented to the Society of Antiquaries of Scotland, and formed the very first donation towards the founding of their valuable collection of national antiquities. The royal gifts and nearly all the family heirlooms have disappeared, but the whole of those presented to the Society still remain in their Museum. The swords are of the usual leaf-shaped form, with perforated handles, to which horn or wood has been attached. Some of the larger broken spear-heads have been pierced with a variety of ornamental perforations, and in addition to these there were bronze rings and staples, similar to those found on various occasions with other remains of the same period. The accompanying woodcut represents one of these, measuring three inches in diameter,

[1] MS. Letter Book, vol. i. p. 43, 1780-1781, Libr. Soc. Antiq. Scot. In a subsequent letter, (Ibid. p. 70,) Sir Alexander Dick describes several very large deer's horns, in addition to the fragments previously found. The results of a careful analysis of some of these bronze relics are given in the succeeding chapter.

[2] They are figured in the Abbotsford Edition, vol. ii. p. 103.

along with a larger one in the Scottish Museum, which was found along with several bronze celts and swords, on the estate of Kilkerran, Ayrshire, in 1846, and more closely resembles the examples most frequently met with both in style and dimensions.

The discovery of gigantic deer's horns and fragments of others along with the weapons and masses of melted bronze, would seem to add to the probability that some considerable manufacture of such weapons had been carried on, at some remote period, on the margin of the loch, and that these were collected for supplying them with handles. But other relics besides those which speak to us of the ingenious arts of the metallurgist, were dredged, along with the shell marl, from the bottom of the loch. "There were likewise brought up," says Sir Alexander Dick, "out of the same place with these brass arms, several human skulls and bones, which had been undoubtedly long preserved in the shell marl, which Dr. Monro and I examined very accurately, and by their very black colour we concluded they had been immersed in the marl for an immense time." Unfortunately neither the skulls nor the horns have been preserved. In this, as in a thousand other instances, we seek in vain for the minuter details that would confer so much value on the vague glimpses of archæological truths scattered through old periodicals, Statistical Accounts, and other unsatisfactory sources of information. Here we might say, with tolerable confidence, lay the manufacturer beside his tools. It becomes an interesting question to know if the deer's horns exhibited marks of artificial cutting, as this would go far to prove their use in the completion of the weapons beside which they lay, and might further help us in forming an opinion as to how they were applied. But still more, we would seek to learn if these skulls corresponded with either of the old types of the tumuli, or if they exhibited the later Celtic type intermediate between the lengthened and shortened oval, and were characterized by superior cerebral development such as their progress in the arts might lead us to expect. It is

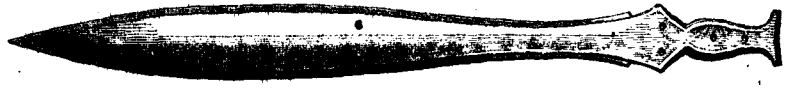


Rings and Staples

possible that some record of these facts has been preserved, since the skulls were submitted to one of the most distinguished anatomists of his day; but I have failed to discover any clue to such, after inquiries submitted both to Dr. Alexander Monro, and to Professor Goodsir who now fills the Chair of Anatomy in the University of Edinburgh.

Fully seventy years after the marl-dredgers had brought to light the remarkable primitive relics buried beneath the alluvium at the bottom of Duddingstone Loch, the Honourable Board of Commissioners of Her Majesty's Woods and Forests determined on constructing a carriage-way round the neighbouring Royal Park, which includes both Arthur Seat and Salisbury Crags. In the progress of the necessary operations for carrying this plan into execution, and while the workmen were excavating the soil immediately above the singular group of basaltic columns popularly styled "Samson's Ribs," they uncovered a sepulchral deposit containing a cinerary urn, which was unfortunately broken to fragments by a stroke of the workman's shovel. Further to the eastward two, at least, and probably more bronze celts of large size were found, along with a small drinking-cup, engraved on a subsequent page.

Still further to the east, almost directly above Duddingstone Loch—where the magnificent "Queen's Drive" is carried along the steep side of the hill at an elevation of nearly 300 feet above the level of the neighbouring loch—two most beautiful and perfect leaf-shaped bronze swords were dug up, in a bed of vegetable charcoal, but with no remains which would indicate its having been a sepulchral deposit. The largest of the two swords measures 26¼ inches long; the other 24⅞ inches by 1⅞ inches in greatest breadth. In other respects they entirely agree, resembling in figure the usual form of this graceful weapon, as will be observed from the annexed engraving of one of



Bronze Sword, Arthur Seat.

them. The swords and the largest of the bronze celts, figured above, are now in the Museum of the Society of Antiquaries. The other

celt and the cup are in my own possession; and as they were obtained from an Irish labourer, who shewed no little reluctance to be questioned, it is extremely probable that these are but a portion of the valuable treasures disclosed in the course of the excavations. How many more may lie interred for the gratification and instruction of future generations covered only by a foot or two of soil!

It naturally becomes a question of considerable interest to us,—Are these weapons, of beautiful and varied forms, the product of native genius and skill? or were they brought hither by foreign conquerors, to remain only as the evidences of national inferiority in arts and arms? The question is one which no Briton can deem worthless; albeit we do not esteem ourselves the pure lineal descendants of the Allophylian aborigines, or of the primitive Celtæ, but, on the contrary, are content to derive our peculiar modern national characteristics as the product of mingled races of Picts, Scots, Romans, Tungrians and other barbarian legionary colonists, Norwegians, Danes, Anglo-Saxons, and Normans.[1] Such are indeed the strange and diverse elements which make up the genealogy of the modern Scot. Nevertheless, his nationality is not the less strong because he derives his inheritance from so many sources; nor is his interest lessened in the aboriginal root. A very simple theory has heretofore sufficed for the classification of all Scottish, and, until very recently, of all British antiquities. Whatever was rude and barbarous, such as unhewn standing stones and monolithic circles, stone hammers and axes, and flint arrows, were native and Druidical; whatever manifested skill, invention, or any progress in the arts, was either Phœnician, Roman, or Danish! Britain, it was tacitly assumed, was sunk in the lowest state of barbarism, until humanized by the bloody missionaries of Roman civilisation. Such ignorant assumption will no longer suffice.

Mr. Worsaae adopts an era extending over about eleven centuries for the continuation of the Danish bronze period. From geological evidence he arrives at the conclusion, which is not improbable, that bronze weapons and implements were in use fully five centuries before the Christian era. But that the Archaic Period continued so long after it, when the neighbouring countries to the south were long

[1] A curious illustration of the mixed stock of the Scottish Lowlanders is furnished in a charter of Malcolm IV., which is addressed to the bishops, abbots, priors, barons, and king's lieges in general, whether French, English, Scots, or Galwegians, and describes the inhabitants of the burgh of St. Andrews as Scots, French, Flemings, and Englishmen.—*Lib. Cart. Prior. Sancti Andreæ*, p. 193.

familiar with the common and more useful metal, and when the Norwegians, who, it is acknowledged, appear never to have known a bronze period, were already taking their position among the Scandinavian nations, preparatory to making their piratical descents on the British shores, seems altogether improbable and opposed to established truths.

No description furnished either by Julius Cæsar or any later classical writer, of the weapons used by the native Britons of the first or second century, in any degree corresponds with the familiar form of the bronze sword so frequently found in the earlier tumuli.[1] Tacitus describes the Caledonians as "a powerful warlike nation, using swords large and blunt at the point (*sine mucrone*) and targets wherewith they skilfully defend themselves against the Roman missiles." The bronze leaf-shaped sword in no respect corresponds with this. It is a short and small, though formidable weapon, and is not only designed for thrusting rather than striking with,—as a heavy, blunt-pointed sword could alone be used,—but was evidently adapted for a warfare in which the chief tactics of the swordsman consisted in the bold thrust; since no example of a bronze sword has ever been found with a guard, that simple and most natural contrivance for defending the hand from the downward stroke of the foe. With such unmistakable evidence before us, the conclusion seems inevitable that the era of the bronze sword had passed away ere the hardy Caledonian encountered the invading legions of Rome. Nevertheless, while there is abundant evidence of the native manufacture of the articles of the Bronze Period, there are no less manifest traces of considerable intercourse throughout Europe during this era, from the near resemblance discoverable in all the bronze articles. The British bronze sword bears a general likeness to those not only of Denmark, but of Gaul, Germany, and even of Italy and Greece; but it has also its peculiar characteristics. It is broader and shorter than the Danish bronze sword, swelling out more towards the middle, so as to suggest the term *leaf-shaped*, by which it is now distinguished. A very remarkable guide to the probable era of such weapons in the south of Europe is furnished by a comparison of some specimens of Hellenic fictile art with a beautiful vase discovered at Vulci by the Prince of

[1] *Vide* Biblio. Topog. Britan. vol. ii. Part 3, for a learned controversy "On brass arms and other antiquities of Scotland," in a series of letters between Sir John Clerk and Mr. Gale.—Reliquiæ Galeanæ, pp. 226-232.

Canino, and described in the Archæologia[1] by Mr. Samuel Birch. The same subject occurs on three vases, and has been supposed to represent the quarrel of Agamemnon and Achilles. On one, a Vulcian hydria of archaic style, a naked and bearded combatant bears a leaf-shaped sword without a guard. On a second, a cylix of later style from the Canino Collection, the combatants are armed with leaf-shaped swords, but with guards; while on the beautiful vase which Mr. Birch refers to as a specimen of Greek art contemporary with the Orestes of Æschylus, the same scene occurs, but the assailant has substituted for the primitive weapon a straight two-edged sword of modern form. Such comparisons cannot be deemed without their value; but independent of these, the variations in the bronze relics of the same type suffice to prove that neither the British antiquities of bronze were brought from Denmark, nor the Danish ones from Britain. The handles of the British weapon especially appear to have been always of wood or horn, while many are met with in Denmark with bronze handles, ornamented with a peculiar pattern, and even sometimes inlaid with gold, but all invariably without a guard.

Among an interesting collection of bronze weapons discovered near Bilton, Yorkshire, in 1848, parts of two broken swords were found, on which Mr. C. Moore Jessop makes the following observations:—"The portions of swords have each been broken off a few inches down the blade, thus leaving the metallic part of the handle entire; which has been covered on both sides with horn or some similar substance, affixed by rivets, which having become loose have allowed the horn to move slightly each way, thus wearing away the metal. They have left evident traces of the shape of the hilt, and likewise prove the weapons to have been long in use."[2] Gordon engraves a fine bronze sword, twenty-six inches long, which was found near Carinn, on the line of the wall of Antoninus Pius, and deposited in the Advocates' Library at Edinburgh. Its most remarkable feature is its handle, which is of brass, but after examining the original, I am satisfied that the latter is a modern addition.[3]

It is especially worthy of note in relation to the makers and owners of these swords, that the handles are invariably small. One of the most marked ethnological characteristics of the pure Celtic race, in

[1] Vol. xxxii. Plates ix. x. xii.

[2] Journal of Archæological Association, vol. v. p. 350.

[3] Itinerar. Septent., p. 118. Sir Robert Sibbald also engraves one with a handle, perfect and more elegant than the former, but he gives no description of it further than naming it a sword of brass.

contrast to the Teutonic, is the small hands and feet; a feature so very partially affected by the mingling of Teutonic with the old Celtic blood of Scotland, that many of the older basket-hilted Highland swords will scarcely admit the hand of a modern Scotsman of ordinary size. This has been observed in various primitive races, and is noted by Mr. Stephens as characteristic of the ancient temple builders of Yucatan. In describing the well-known symbol of the *red hand*, first observed at Uxmal, Mr. Stephens remarks,—"Over a cavity in the mortar were two conspicuous marks, which afterwards stared us in the face in all the ruined buildings of the country. They were the prints of a red hand, with the thumb and fingers extended, not drawn or painted, but stamped by the living hand, the pressure of the palm upon the stone. There was one striking feature about these hands—they were exceedingly small. Either of our own spread over and completely hid them."[1] This is another of the physical characteristics of the earlier races well worthy of further note. While the delicate small hand and foot are ordinarily looked upon as marks of high-breeding, and are justly regarded as pertaining to the perfect beauty of the female form, the opposite are found among the masculine distinctions of the pure Teutonic races,—characteristic of their essentially practical and aggressive spirit,—and are frequently seen most markedly developed in the skilful manipulator and ingenious mechanician.

The spear-heads of this period are also marked by national distinctive features; the exceedingly common British form, for example, with loops to secure it to the shaft, being unknown in Denmark, and a variety of pierced heads common in Scotland and Ireland being rarely or never found in England. So it is with other varieties of weapons, implements, and personal ornaments: some which are common in Denmark are unknown here, or assume different forms; others with which we are familiar are unknown to the Danish archæologist; while both are in like manner distinguished from those of Germany, France, and the south of Europe. The distinctive peculiarities may indeed be most aptly compared to those which mark the various national developments of medieval art, and give to each an individuality of character without impairing the essential characteristics of the style. The extent of international communication was only so much greater and more direct in the twelfth and thirteenth centuries, than in those

[1] Stephens' Travels in Yucatan, vol. i. p. 178.

older centuries before the Christian era, as to produce a more rapid interchange of thought and experience.

This national individuality, accompanying such remarkable correspondence to a common type, may therefore be assumed as justifying the conclusion that some considerable intercourse must have prevailed among the different races of Europe during that remote period to which we refer; and hence we are led to assume an additional evidence of early civilisation, while at the same time no sufficient proof appears to point to such a sudden transition as necessarily to lead to the conclusion that the bronze relics belong entirely to a new people. On the contrary, the evidence of slow transition is abundantly manifest. The metallurgic arts, and the models by which their earliest application was guided, were in all probability introduced by a new race, who followed in the wake of the older wanderers from the same Eastern cradle-land of the human race. But the rude stone moulds, the sand-cast celts and palstaves, and the relics of the primitive forges in which they were wrought, all point to aboriginal learners slowly acquiring the new art, while perhaps its originators were introducing those works of beautiful form and great finish and delicacy of workmanship, which the antiquary of the eighteenth century could ascribe to none but the Roman masters of the world.

Mr. Worsaae remarks, after pointing out the correspondence, in many respects, between the bronze relics of Denmark and those of other countries of Europe, these "prove nothing more than that certain implements and weapons had the same form among different nations."[1] And again, "from these evidences it follows that the antiquities belonging to the Bronze Period, which are found in the different countries of Europe, can neither be attributed exclusively to the Celts, nor to the Greeks, Romans, Phœnicians, Sclavonians, nor to the Teutonic tribes. They do not belong to any one people, but have been used by the most different nations at the same stage of civilisation; and there is no historical evidence strong enough to prove that the Teutonic people were in that respect an exception. The forms and patterns of the various weapons, implements, and ornaments, are so much alike, because such forms and patterns are the most natural and the most simple. As we saw in the Stone Period how people at the lowest stage of civilisation, by a sort of instinct, made their stone implements in the same shape, so we see now, in the first traces of a

[1] Primeval Antiquities of Denmark, p. 41.

higher civilisation, that they exhibit in the mode of working objects of bronze a similar general resemblance."[1] But are the forms and patterns thus natural and simple? This argument, which abundantly satisfies us as to the universal correspondence of the majority of tools and weapons of the Stone Period, entirely fails when thus applied to the works of the Bronze Period. The former are in most cases of the simplest and most rudimentary character: the perforated oblong stone for a hammer, the pointed flint for an arrow-head, and the longer edged and pointed flint for a knife or spear. Human intelligence, in its most barbarous state, suggests such simple devices with a universality akin to the narrower instincts of the lower animals. They are, in truth, mathematically demonstrable as the simplest shapes. But the beauty and variety of form and decoration in the productions of the Bronze Period bring them under a totally different classification. They are works of art, and though undoubtedly exhibiting an indefiniteness peculiarly characteristic of its partial development, are scarcely less marked by novel and totally distinct forms than the products of the many different classic, medieval, or modern schools of design. The form of the leaf-shaped sword, indeed, is unsurpassed in beauty by any later offensive weapon. We are justified, therefore, in assuming that the general correspondence traceable throughout the productions of the European Bronze Period, affords evidence of considerable international intercourse having prevailed; while the peculiarities discoverable on comparing the relics found in different countries of Europe compel us to conclude that they are the products of native art, and not manufactures diffused from some common source. We have already traced them as pertaining to the infantile era of Greece, and may yet hope to find them among the indications of primitive Asiatic population, thereby supplying a new line of evidence in illustration of the north-western migration of the human race, and probably also a means of approximation towards the date of the successive steps by which the later nomades advanced towards the coasts of the German Ocean.

In the former section numerous instances have been referred to of the discovery of canoes belonging, by indisputable evidence, to the Primeval Period. One example, at least, has been recorded of a ship apparently belonging to the succeeding era of bronze, and which, both in size and mode of construction, amply accords with the assumed

[1] Primeval Antiquities, p. 138.

characteristics of the more advanced period, and with the idea of direct intercourse with the continent of Europe. "In this town," (Stranraer,) says the old historian of Galloway, writing in 1683, "the last year, while they were digging a water-gate for a mill, they lighted upon a ship a considerable distance from the shore, unto which the sea at the highest spring tides never comes. It was transversely under a little bourn, and wholly covered with earth a considerable depth; for there was a good yard, with kail growing in it, upon the one end of it. By that part of it which was gotten out, my informers, who saw it, conjecture that the vessel had been pretty large; they also tell me that the boards were not joined together after the usual fashion of our present ships or barks, as also that it had nailes of copper."[1] Here we find remarkable evidence of progress. The rude arts of the aboriginal seaman, by which he laboriously hollowed the oaken trunk and adapted it for navigating his native seas, have been superseded by a systematic process of ship-building, in which the metallic tools sufficed to hew and shape the planks as well as to furnish the copper fastenings by which they were secured. Vessels thus constructed were doubtless designed for wider excursions than the navigation of native estuaries and inland seas; nor must we assume, because the records of ancient history have heretofore concentrated our interest on the countries bordering on the Mediterranean, that therefore the German Ocean and the British seas were a waste of unpeopled waters, save, perhaps, when some rude canoe, borne beyond its wonted shelter on the coasts, timorously struggled to regain the shore. Enough has already been advanced to disabuse us of the fallacy, that where no annals of a people have been preserved nothing worth chronicling can have existed.

Much will be gained if faith can be established in the fact, that deeds worth recording were enacted in Britain in these old times when no other chronicler existed but the bard who committed to tradition his unwritten history, and the more faithful mourner who entrusted to the grave the records of his reverence or his love. Faith is required for the honest and zealous study of the subject; but with this we doubt not that many links will be supplied which are still wanting to complete the picture of the past. This much, however, seems already established, that at a period long prior to the first cen-

[1] "A large Description of Galloway, by Mr. Andrew Symson," p. 83. App. vol. ii. Hist. of Galloway from the earliest period to the present time. Kirkcudbright, 1841.

tury of the Christian era the art of working in metals was introduced into Britain, and gradually superseded the rude primitive implements of stone. The intelligent British savage, supplied with this important element of civilisation, wrought and smelted the ores, melted and mixed the metals, formed moulds, and improved on early and imperfect models, until he carried the art to such perfection that even now we look upon his later bronze works with admiration, and are hard to be persuaded that they are not the creations of Phœnician or Roman, rather than of native British civilisation prior to the introduction of letters.

How remote the origin of this transition-period of civilisation dates we cannot as yet presume to say; but with our preconceived notions, derived chiefly from an exclusively classical education, we are more apt to err on the side of too modern than of too remote a date. Mr. Worsaae, after discussing and rejecting the idea of a Roman origin for the bronze relics of Denmark, adds,—"Nor in all probability have these bronzes reached us from Greece, although, both with regard to their form and ornaments, particularly the spiral ornaments, a greater similarity appears to exist between those which occur in the north and those found in the most ancient tombs of Greece. For independently of the fact, that the latter have hitherto occurred but seldom, so that our knowledge of them is extremely imperfect, they belong to so very remote a period—1000 or 1400 years before the birth of Christ—that we can by no means be justified in supposing that any active intercourse then existed between countries so remote from each other."[1] But why not? Active it might be, though indirect; or, what is equally likely, both might derive their models from a common source—perhaps Phœnician, the apparent source of Greek metallurgic art; perhaps from the older regions of central Asia, whence both were sprung. We see, at least, from evidence which appears to me incontrovertible, that at a much more remote period a human population occupied the British Isles; and we shall allow our judgments to be misled by very fallacious reasoning if we conclude that they could not have attained to any degree of civilisation at the period referred to, merely because no notice of them occurs in the pages of classic writers. The Greeks and Romans looked with contempt on all other nations. Partly from this national pride, but still more perhaps from a want of that philological talent peculiar to modern times, they gave little heed to the

[1] Primeval Antiquities of Denmark, p. 41.

languages of their most civilized contemporaries, and looked on their barbarian arts and manners with contempt. Yet among the *barbarians* of the Greeks we must include the Egyptians, the Phœnicians, and the Hebrews; even as we ourselves rank among the barbarians of the modern Chinese, whose annals at most will tell of us as a roving race who first appeared in history towards the end of the seventeenth century!

The civilisation of the British Bronze Period does not appear to have been of so active a nature as to have produced any very rapid social changes. It did not break up the isolated tribes of Britain, and unite them into kingdoms or associated states. Its material element was never so abundant as to admit of any such great contemporaneous development. It was rather such a change as might slowly operate over many centuries; and that it did so is rendered most probable by the many relics of it which still remain. The Toltecans and Yucatecs of the New World achieved much in their Bronze Period unknown to medieval Europe; nor is it altogether impossible that even now, beyond the vast forests so recently explored by Mr. Stephens, a native race may be found practising arts akin to those of Montezuma's reign. Certain it is that the British Bronze Period was passing away in the transition-state of a later era when the Roman galleys first crossed the English Channel, and from the last century B.C. we must reckon backward up to that remote and altogether undetermined era, when the elder Stone Period passed by slow transition into that of Bronze.

CHAPTER III.

PRIMITIVE BRONZE.

Among the various means of arriving at definite truths in relation to primitive works in metal, that of chemical analysis has not been lost sight of, and a number of ascertained results are now on record. Before proceeding to examine in detail the relics of this second period, it will be useful to glance at the bearings of this branch of scientific evidence on the general question.

It may now be received as an established fact, that the manufactures of this period consist entirely of bronze and not of brass—that is, of an alloy of copper and tin, and not of copper and zinc; but also including other metals, and especially a proportion of lead, in some examples exceeding the quantity of tin present. Even among the Romans we have abundant evidence that the alloy of copper and zinc was rarely used, although it is now known to be both more economical, and easier to work into a variety of forms. Mr. Worsaae, after remarking on the resemblance observable among the weapons, implements, and ornaments of bronze found in various countries, both in the north and south of Europe, adds,—"They have all been cast in moulds, and the metal is of the same composition—nine-tenths copper, and one-tenth tin. From this there would be farther reason to suppose that they all originated with one people."[1] This country, as has been already shewn, he elsewhere supposes may be England. From a careful examination and comparison of the antiquities themselves, however, the Danish archæologist is led to the conclusion that the bronze objects were manufactured in the various countries of

[1] Primeval Antiquities, p. 137.

Europe, where they are now found, and that only the metal was imported from some common centre. The same idea appears at one period to have been adopted by the Rev. Dr. Robinson, an Irish archæologist still more distinguished for his devotion to astronomical science than for his intelligent elucidation of antiquarian investigations; but the results of more extended observation, communicated by him to the Royal Irish Academy in 1848, shew that he was ultimately led to a different conclusion. Minute examination of the bronzes themselves will be found to throw fully as much doubt on the probability of a common origin for the mixed metal, as for the weapons into which it has been fashioned. The difference even in colour and texture is very great, and in some cases still only imperfectly accounted for. Many of the bronze weapons found both in Scotland and Ireland, are of a bright yellow colour, like brass, or rather resembling gilded metal; it does not tarnish, and, on analysis, is found to contain no zinc. Others are more of a copper colour, also little liable to tarnish or corrode; while a third quality, if polished, rapidly resumes a dark and nearly black colour, and is frequently found covered with verd antique. To the first of these the term *Celtic brass* is often applied, though it is in common use for all the varieties of primitive bronze. Analysis of these relics by no means bears out the idea of any uniform system of combination of the pure metals, or of their being derived from a single source in the form of bronze. The variations in the proportionate admixture of the metals were indeed necessarily confined within a limited range, especially in the manufacture of weapons. It did not require any mutual intercourse between the old Scandinavian and British armourer to teach them the most useful combinations of the new alloy. If the sword or spear proved either too ductile or too brittle for use, it would be consigned anew to the furnace, with such additions to the mixed metals as experience must soon suggest. The same would hold good even if we suppose that, as Cæsar affirms, the Britons used imported bronze, (*ære utuntur importato.*) Whether the tin and copper were mixed by Phœnician, Roman, or British metallurgists, similar proportional combinations of the two would necessarily be the result of experience. It will be seen, however, that the "Celtic brass" of British archæologists is neither invariably composed of exactly the same proportions of tin and copper, nor even solely of these two metals.

One of the most elaborate and valuable reports published on this

subject is contained in a communication read to the Royal Society of London, June 9, 1796, and printed in the Philosophical Transactions of that year. It is entitled, "Observations on some metallic arms and utensils, with experiments to determine their composition," by George Pearson, M.D., F.R.S. His experiments were both analytic and synthetic, and consequently enable us to trace the probable experience of the primitive metallurgist, before he had ascertained the most useful proportions of the metals for practical purposes. Copper, we know, is not unfrequently found native in its metallic state, and fit for immediate use. Tin, though never found in this state, occurs in England in the same locality with the copper, and often near the surface. It might, therefore, even accidentally be combined with the former metal. The fact of the two possessing, when in combination, the requisite hardness for domestic or warlike purposes which neither of them has when alone, appears to have been ascertained at a very remote period. In addition to this indispensable property, the combination possesses the valuable qualities of being more readily fusible and continuing longer in the fluid state. Hence the mixture of two of the metals most readily accessible to the native Briton greatly facilitated all his other operations.

The synthetic experiments of Dr. Pearson furnish the following results applicable to the present argument:—The bronze relics submitted to analysis and comparison consisted—1. of a lituus, or musical wind-instrument, found in the river Witham, Lincolnshire, in 1768; 2. A spear-head of the common unperforated form, "made of cast metal, as appears from its rough surface, figure, texture, and grain. . . . It is open grained almost as copper, and porous, as if made of bad metal, of a blackish-brown or dark-grey colour;" 3. A sauce-pan, (Anglo-Roman patella,) also made of cast metal, open grained, impressed on the handle with a stamp, C. ARAT.; 4. A bronze scabbard, with a sword of iron within it, thought to be Danish; and, 5. Three celts, (Nos. 1 and 3, what we now term axe-heads, No. 2 an axe-shaped palstave,) all found in the bed of the river Witham. In his comparative experiments Dr. Pearson fused fifty grains of tin with 1000 grains of copper; *i.e.*, one part of tin to twenty parts of copper. The result, when polished, differed in shade of colour from that of the celt metals, being much darker—a point not unworthy of note in determining some of the characteristics of primitive bronze relics. Its fracture shewed a colour inclining to the peculiar red of copper. One hundred grains of tin

united by fusion with 1500 grains of copper; *i.e.*, one part of the former to fifteen parts of the latter, resembled the celt metals, Nos. 1 and 2 in colour, polished surface, grain and brown colour of the fracture, the red of the copper being no longer apparent. It was stronger than the celt metals, but not so hard, while it was harder than the spear-head and the patella. No very remarkable differences are observable in the experiments of the combinations of twelve, ten, nine, and eight parts of copper with one of tin. When, however, the copper is reduced to seven parts to one of tin, the increase in hardness and brittleness becomes very apparent, while the alloy is decidedly paler in colour. The same characteristics were still more marked on successively reducing the proportions of copper to seven, six, five, four, and three; and when an alloy was made of two parts of copper with one part of tin, it "was as brittle almost as glass." It is not difficult, from these results, to imagine the process pursued by the old worker in bronze, who, having ascertained that he could harden his copper by alloying it with tin, would not fail to diminish the added quantities of the latter till he had secured an efficient practical admixture for the purposes of his manufacture, in which it is apparent, from the above results, that no very great nicety of apportionment of the ingredients was required. The most fit proportions for the manufacture of weapons and tools Dr. Pearson considers to be one part of tin to nine parts of copper.

The result of a comparison of numerous analyses of primitive bronze relics will, I think, lead to the conclusion that their correspondence is not greater than might be anticipated to arise from the experience acquired by isolated workers, when dealing with the same metals, with similar objects in view, while the frequent presence of other metals besides tin and copper may, in the majority of cases, be accepted as additional proof of the unsystematic processes of the old metallurgist; though in some instances we may trace, in the adaptation to a special purpose, the evidence of design.

The results of Dr. Pearson's analytic experiments are as follows:—

The Lituus contained a little more than twelve per cent. of tin; *i.e.*, about one part of tin to seven and a half parts of copper. Specific gravity, (*before melting,*) 8.3.

The Spear-head; fourteen per cent. of tin, or somewhat less than one part of tin to six parts of copper; in addition to which it contained the proportion of fifteen grains of silver in a troy pound of the mixed metal. Specific gravity, 7.795.

The Patella; a little more than fourteen per cent. of tin, or about one part of tin and six parts of copper. Specific gravity, 7.960.

Bronze Scabbard; a little more than ten per cent. of tin, or about one part of tin to nine parts of copper. Specific gravity, 8.5.

Celts, Nos. 1 and 2; a little more than nine per cent. of tin, or about one part of tin to ten parts of copper. Specific gravity, No. 1, 8.780; No. 2, 8.680; No. 3, a little more than twelve per cent. of tin, or about one part of tin to seven and a half parts of copper. Specific gravity, (*after melting,*) 8.854.

In the month of August 1816, some labourers employed in lowering the road on the top of a small eminence, called Huckeridge Hill, near Sawston, Cambridgeshire, discovered the remains of a human skeleton, at the feet of which stood two large bronze vessels. On the left side of the skeleton were also found an iron sword greatly corroded, and fragments of a very coarse urn, half an inch in thickness. The rim of the largest bronze vessel was ornamented with a row of bosses, indented from the under side. Dr. Clarke, Professor of Mineralogy in the University of Cambridge, subjected portions of the bronze to analysis, and communicated the result to the Society of Antiquaries of London. The conclusion he arrived at was, that they consisted of $\frac{88}{100}$ of copper with $\frac{12}{100}$ of tin, or about one part of tin to seven and a half parts of copper. Dr. Clarke also assigns exactly the same proportions of copper and tin as constituting the bronze coinage of Antoninus Pius, and of his successor Marcus Aurelius; which it will be seen correspond with those of the lituus and one of the celts analyzed by Dr. Pearson. The process adopted by the former, however, in the chemical analysis of those bronzes is much less satisfactory than that of Dr. Pearson, as he appears to have assumed the absence of all other metals, and sought only for copper and tin.[1] A bronze sword, found in France, proved on analysis to contain 87.47 parts of copper to 12.53 of tin in every 100 parts, with a portion of zinc so small as not to be worth noticing, or capable of affecting the bronze.[2] The analyses of various specimens of antique bronze, including a helmet with an inscription, found at Delphi, and now in the British Museum, some nails from the Treasury of Atreus at Mycenæ, an ancient Corinthian coin, and a portion of a breastplate or cuirass of exquisite workmanship, also in the British Museum, are stated to have afforded about eighty-seven or eighty-eight parts copper to about twelve or thirteen of tin per cent.[3]

[1] Archæologia, vol. xviii. p. 343.

[2] Mongez, Mém. de l'Instit.

[3] Article *Bronze*, Penny Cyclopædia, vol. v. p. 468.

In the communication of Dr. Robinson to the Royal Irish Academy, previously referred to, he laid before that body a report of a most valuable discovery made about eighteen years since in King's County. It consisted of a large bronze vessel; which contained, in addition to various relics acquired by the late Dean of St. Patrick's and other individuals, thirteen litui or trumpets of bronze, the largest having their seams rivetted; thirty-one bronze celts of different sizes; twenty-nine spear-heads; three gouges; and thirty-one bells, believed to be for sheep or cattle—all of bronze. The account of this remarkable discovery had been reserved for sixteen years, owing to the strange suspiciousness of the Irish peasants by whom it was found, who imposed on the purchaser the promise of keeping the details secret during their lives. The last of them died in the winter of 1848, and then he felt himself at liberty to communicate the particulars which Dr. Robinson laid before the Academy.

"The vessel, which is now in the collection of the Earl of Rosse, was found in the townland marked Dooros Heath, in sheet 30 of the Ordnance Map of King's County, near Whigsborough, in what appears from the description to have been a piece of cut-out bog, about eighteen inches below the surface. It is composed of two pieces neatly connected by rivets. The bronze of which the sheets are formed possesses considerable flexibility, but is harder than our ordinary brass, and it must have required high metallurgic skill to make them so thin and uniform. On the other hand, it is singular that neither in this or any other bronze implements with which I am acquainted, are there any traces of the art of soldering; if it might be supposed objectionable in vessels exposed to heat, yet in musical instruments this would not apply. Such vessels have often been found, but the contents of this are peculiar. When discovered (without any cover) it seemed full of marl, on removing which it was found to contain an assortment of the instruments which may be supposed most in request among the rude inhabitants of such a country as Ireland must have been at that early epoch. . . . It seems likely that the collection was the stock of a travelling merchant, who, like the pedlar of modern times, went from house to house provided with the commodities most in request, and it is easily imagined that if entangled in a bog with so heavy a load, a man must relinquish it.

"This is connected with another question, the source from which the ancient world was supplied with the prodigious quantity of bronze arms and utensils which we know to have existed. This caught my imagination many years since, and I then analyzed a great variety of bronzes, with such uniform results that I supposed this identity of composition was evidence of their all coming from the same manufactures. Afterwards I found that the peculiar properties of the atomic compound already referred to are sufficiently distinct to make any metallurgist who was engaged in such a manufacture select it. It also appears to me more permanent in the crucible."

Dr. Robinson states that this alloy, when used for weapons, is a constant chemical compound containing fourteen equivalents of copper and one of tin, or nearly eighty-eight parts of the former and twelve of the latter by weight. But no account is given by him of the process of analysis, and the results justify the supposition that in these experiments, as in those of Dr. Clarke of Cambridge, he had assumed the absence of all other metals, and sought only for copper and tin.[1] Notwithstanding the opinions quoted above, Dr. Robinson still inclines, on other grounds, to the conclusion that we are justified in tracing the bronze to some common source, and this he conceives to be the Phœnicians. In all the weapons and implements the points are entire and sharp, and the edges unbroken. The spear-heads are the most remarkable as specimens of workmanship. They are of various sizes, and of great diversity of pattern, and also have their points and edges perfect as if they had never been used. They prove, as Dr. Robinson remarks, not only that the workmen who made them were masters of the art of casting, but also that they possessed high mechanical perceptions; their productions shewing a skilful adaptation of the material to the end in view. These indications appear to him to confirm the idea of their derivation from some foreign source. "Yet," he also adds, "in many of them the colour of the bronze is such as, at first sight, to excite a suspicion that they were gilded." This has already been noted as a peculiarity observed hitherto almost exclusively in the primitive bronze relics of Scotland and Ireland, and even there occurring in greatest abundance in certain districts. Dr. Petrie observed, at the meeting of the Academy, that all the bronze relics found in King's County have the characteristic golden tinge referred to, and added that the number of beautiful moulds for hatchets and other implements of warfare found from time to time in Ireland, prove that the ancient Irish understood the art of manufacturing bronze instruments such as those discovered in the vessel found at Dooros Heath.

[1] The extracts from Dr. Robinson's interesting communication are copied from a report of the Second Meeting of the Royal Irish Academy, session 1848-9, in Freeman's Dublin Journal. From the length of the report, its minuteness, and explanatory footnotes, it appears to have been furnished by the author; but like all newspaper reports of scientific proceedings, it must be liable to errors for which the author is not responsible. From a personal opportunity courteously afforded me, during the meeting of the British Association at Edinburgh this year, of consulting Dr. Robinson on the subject, I learned that the uniformity of results in his analyses was only comparative, and that lead had not been tested for.

With the desire of testing as far as possible the exact bearing of the chemical evidence on this interesting inquiry in relation to relics of the Scottish Bronze Period, I obtained permission from the Council of the Society of Antiquaries of Scotland to submit various specimens of bronze in the Society's collection to chemical analysis. The results will be found to differ very remarkably from that ideal uniformity which has been supposed to establish the conclusion of some single common origin for the metal, if not indeed for the manufactured weapons and implements. The experiments have been made in the laboratory and under the directions of my brother, Dr. George Wilson, whose acknowledged experience as an analyst is sufficient guarantee for the accuracy of the results. In these analyses it will be seen that the presence of lead has been detected in every instance in greatly varying quantities, but in two of the examples exceeding the tin.

Five of the examples were selected from specimens in the Museum of the Society of Antiquaries, the sixth (No. 4) is an axe in my own possession.[1] They are arranged according to the quantity of copper present in each. No. 1 is a piece of a large bronze cauldron found in the neighbourhood of Lauder, Berwickshire. The chief portions of it, which still remain in the Scottish Museum, appear to have been partially melted by excessive heat, so as to make a large hole in the side of the vessel, and above this a thin plate of metal has been rudely rivetted to repair the injury. No. 2 is a piece of a leaf-shaped sword dredged out of Duddingstone Loch near Edinburgh; No. 3, part of one of the large bronze vessels usually styled Roman camp-kettles, found at Huntly Wood, near West Gordon, Berwickshire; No. 4, an axe-head in my own possession, which was found in draining a field near the village of Pentland, Mid-Lothian. This was of the bright yellow metal so common in the earlier bronze relics of Scotland and Ireland, and of the very rudest workmanship, having apparently been cast in sand. It was full of air-holes, and only ground at the edge like the most primitive axe-heads of flint. Its specific gravity, however, it will be observed, is high, so that it must have been hammered in order to give firmness and consistency to the imperfect results of the crucible and mould. No. 5 is a piece of a bronze cauldron dredged up from Duddingstone Loch, which appears,

[1] It may be proper to add, that in selecting specimens of native bronze implements from the Scottish collection for the purpose of analysis, no difficulty was found in obtaining broken fragments suitable for the purpose, without destroying any perfect example of primitive art.

like other large vessels of this period, to have had bronze rings attached to it for suspension, one of which has been figured on a previous page, from the original in the Scottish Museum. No. 6 is one of the implements to which the name of Palstave is now given. It was found in the parish of Denino, Fifeshire, and appears to have been very imperfectly cast—probably in loam. Like the axe-head No. 4, it was rough and full of air-holes, while from its peculiar form it could not be subjected to the after-process of hammering. Its specific gravity is accordingly unusually small. The examples, it will be seen, present every requisite of variety, including weapons, implements, and vessels, from Fife, Mid-Lothian, and Berwickshire, selected solely as furnishing a comprehensive diversity in the elements of comparison. The following are the results of the analyses and the description of the process by which they were obtained, nearly the whole of the experiments having been repeated several times:—

ANALYSES OF ANCIENT BRONZES.

	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.
Copper,	92.89	88.51	88.22	88.05	84.08	81.19
Tin,	5.15	9.30	5.63	11.12	7.19	18.31
Lead,	1.78	2.30	5.88	0.78	8.53	0.75
	99.82	100.11	99.73	99.95	99.80	100.25
Loss,	0.18	...	0.27	0.05	0.20	...
Gain,	...	0.11	...	...	...	0.25
	100.	100.	100.	100.	100.	100.
Specific Gravity,	6.37	6.23	6.77	8.27	7.75	6.16

"These bronzes were first carefully qualitatively analyzed, and found to consist of copper, tin, and lead. Zinc, bismuth, antimony, and silver were carefully sought for, but could not be found. It is probable, however, that a minute trace of the last metal, too small to admit of detection, was present, not, however, as an artificial addition to the alloy, but as a natural accompaniment of the lead.

"In the quantitative analysis, a weighed portion of the bronze was digested in nitric acid, which dissolved the copper and lead, and converted the tin into the insoluble white peroxide. This was collected on a filter, carefully washed, dried, and weighed, after the filter had been burned. The filtered solution containing the copper and the lead was then evaporated to dryness along with a portion of sulphuric acid, which converted the lead into the insoluble sulphate of that metal. This was collected on a filter, treated like the oxide of tin, and weighed. The solution of copper which passed through the filter was precipitated by solution of

caustic potass added in excess, and kept at the boiling point till the oxide of copper became dark brown. It was then collected on a filter, washed with boiling water, and weighed after the combustion of the filter.

"The number obtained by adding together the quantities of copper, tin, and lead exceeds that of the quantity of bronze taken in the second and sixth analysis. The increase is marked as excess, and is subtracted from the added numbers, so as to reduce their sum to 100. It should probably be deducted from the copper, which in the state of oxide is not easily deprived of the whole of the potass employed to precipitate it, and is liable, moreover, to retain a little moisture even when it appears quite dry. The presence, accordingly, of potass or water, or both, increases the apparent weight of the copper. As the excess, however, amounts in the one case only to $\frac{11}{10.000}$th of the weight of the bronze analyzed, and in the other to $\frac{25}{10.000}$th of it, it does not materially influence the result, whether as deducted from the entire alloy, or only from the copper."

To this chemical evidence I am able, through the kindness of Mr. Bell of Dungannon, to add the following results of an analysis recently made for him by Professor Davy of portions of two leaf-shaped bronze swords found in Ireland:—

"No. 1.—*Very brittle.*

Copper,	88.63
Tin,	8.54
Lead and Iron,	2.83

The lead and iron in this alloy are most likely impurities in copper and tin.

No. 2.—*Much more malleable.*

Copper,	83.50
Lead,	8.35
Tin,	5.15
Iron,	3.00

The iron in this alloy is probably an impurity in the other metals."

These are not the only instances in which the presence of iron has been ascertained in Irish bronze swords. In 1774 Governor Pownall laid before the Society of Antiquaries of London an account of some Irish antiquities, including two bronze swords found in a bog at Cullen, county Tipperary. In the communication he remarks,—"That the Society might have a precise and philosophic description of the metal, I applied to the Master of the Mint; and by his direction Mr. Alchorn, His Majesty's Assay-master, made an accurate assay of the metal. 'It appears,' he says, 'to be chiefly copper, interspersed with particles of iron, and perhaps some zinc, but without containing either gold or silver. It seems probable that the metal was cast in its present state, and afterwards reduced to its proper

figure by filing. The iron might either have been obtained with the copper from the ore, or added afterwards in the fusion, to give the necessary rigidity of a weapon. But I confess myself unable to determine anything with certainty.'"[1] The analysis here appears to have been merely qualitative; and from the indefinite reference to the possible presence of zinc, it cannot be assumed to have been made with great strictness. The presence of iron, however, may be assumed as undoubted, whether it was the result of accident or design.

One important result which these experiments furnish is, that the composition of the mixed metal of the Bronze Period indicates no such uniformity as might be anticipated in manufactures derived entirely from one source; but, on the contrary, that different examples of it belonging to the same period exhibit all the degrees of variation that might be expected in the work of isolated manufacturers, very partially acquainted with the chemical properties of the standard compound, and guided, for the most part, by the practical experience of the result of their labours. The variations in the proportions of the elements of the bronze are obviously such as to preclude all comparison with any ancient type. In regard to the favourite theory of Phœnician origin for these relics comparison is impossible, as we possess no authentic remains of Phœnician art. An analysis of Egyptian bronze relics, however, would furnish interesting results in regard to the ancient metallurgic arts practised in the countries bordering on the Mediterranean. Such arts, however, were by no means confined to the few ancient historic races, among whom the Tyrians and Phœnicians generally rank the foremost for skill in the working of metals. The Turditani, a tribe occupying the province of Andalusia, in Spain, are described by Polybius as related to the Celtæ, though Dr. Prichard conceives it more probable that they were of Iberian than of Celtic kindred.[2] They are stated to have been the most learned and polished people in Spain. They had books, poems, and laws composed in verse, and boasted of a knowledge of the use of letters for 6000 years. It is said of this people, that when the Carthaginians made an expedition into Spain they found the Turditani possessed of furniture and vessels of silver, and far advanced in wealth and luxury. It is not, therefore, indispensable that Irish antiquaries should trace their metallurgic arts to a Phœnician source, when a country so much nearer their own, and with which many of their his-

[1] Archæologia, vol. iii. p. 355.

[2] Prichard's Hist. of Mankind, vol. ii. p. 92.

toric traditions indicate an early intercourse, was in possession of similar arts at so remote a period.

The other point of greatest importance brought out in the above analyses is the uniform presence of lead, though in greatly varying quantities; amounting in the palstave to only $\frac{75}{10,000}$; while in the cauldron dredged from Duddingstone Loch, along with leaf-shaped swords, perforated spear-heads, &c., it exceeds the whole tin present in the compound; amounting to 8.53 per cent. of the whole. Lead is known to have been used by the Romans in a similar manner, possibly from motives of economy, as in their brass coinage, in which the antiquary has long been familiar with the presence of this metal.[1] It is also worthy of special note how greatly all the ingredients of No. 2 and No. 5 vary in proportion, though both were found together, and undoubtedly belong to the same period. Possibly the very marked difference in the proportion of the alloys may prove to be the result of design, as the only other example at all resembling the Duddingstone cauldron, No. 5, is the so-called Roman camp-kettle, No. 3, from Berwickshire. The difference between them is considerable, but in both the quantity of lead present is greater than of tin. No such conclusion, however, can by any possibility be assumed in reference to the weapons analyzed by Professor Davy. These were both swords, similar in form, and designed for the same purpose; yet in one the proportion of lead present greatly exceeds that of tin, while in the other it is so small as to suggest the possibility of its presence being accidental. A greatly more limited scale of variations would afford evidence enough to establish the certainty of a local and independent manufacture carried on throughout the Bronze Period, by numerous native metallurgists possessed of just such an amount of crude practical skill as sufficed to render the new material available for their use.

[1] Biblio. Topog. Britan. vol. ii. p. 303.

CHAPTER IV.

WEAPONS AND IMPLEMENTS.

THE works of the Bronze Period possess an entirely new and distinct source of interest from those which preceded them, in so far as they exhibit not only the skill and ingenuity which is prompted by necessity, but also the graceful varieties of form and decoration which give evidence of the pleasurable exercise of thought and fancy. Were we indeed to select the most perfect and highly finished productions resulting from the knowledge of working in metals, and to place these alongside of the best works of the Stone Period, we could hardly avoid the conclusions, already adopted by northern archæologists, that the works in metal belong to an entirely new and distinct race.[1] A more careful investigation, however, tends greatly to modify such conclusions in regard to the British bronze remains. Independently of the probable presence of Allophylian races in Britain prior to the earliest arrival of the Celtæ—which the evidence already adduced of the very remote period to which the existence of a human population must be assigned seems alone sufficient to determine in the affirmative—there can be no doubt that stone implements were in use even within the Celtic era, and that it was not by an abrupt substitution but by a

[1] Mr. Worsaae remarks, (Primeval Antiquities, p. 24,) "We must not by any means believe that the Bronze Period developed itself among the aborigines gradually or step by step out of the Stone Period. On the contrary, instead of the simple and uniform implements and ornaments of stone, bone, and amber, we meet suddenly with a number and variety of splendid weapons, implements, and jewels of bronze, and sometimes indeed with jewels of gold. The transition is so abrupt that from the antiquities we are enabled to conclude that the Bronze Period must have commenced with the irruption of a new race of people, possessing a higher degree of cultivation than the early inhabitants."

gradual transition that they were entirely displaced by those of metal. Reference has already been made to some striking indications of this in the various moulds which have been discovered from time to time in the British Isles. It is still more obvious in the numerous examples of weapons and tools. When classified on the same simple and natural principle which induces us to recognise the Stone Period as prior to that of bronze, we detect the evidences of a slow and very gradual change, and discover the link which unites the two periods as in regular and orderly succession. In the earliest bronze axes the form of their prototype in stone is repeated with little or no variation. Both are equally deficient in any stop-ridge, loop, or perforation to facilitate the securing of them to a handle; and we cannot avoid recognising in the latter the new materials in the hands of the old worker in stone. Another and no less suggestive class of illustrative examples of this transition-period may be detected in the stone implements occasionally discovered, obviously made in imitation of bronze weapons. Mr. G. V. Dunoyer remarks in a valuable article on bronze celts,[1] in referring to a stone axe in the Museum of the Royal Irish Academy, very closely resembling the simplest form of bronze axe,—"So remarkable is this similarity, that it is possible to suppose this class of weapon to be the last link between the rude wedge-shaped stone celt and that of bronze; or in it we may perceive an attempt to revert to the old material, improving the form after that of the earliest metal implement." It is perhaps still more legitimate to infer from it the scarcity of the metals at this early period compelling the axe-maker, while adopting the newer models, to retain the only material at his command.

Much learned and very profitless controversy has been carried on respecting the weapons of the Bronze Period. The archæological works of last century and of the early years of the present century, abound with elaborate demonstrations of the correspondence of celts and spear-heads to the Roman securis, hasta, and pilum. It may be doubted if some of the more recent attempts to determine the exact purpose for which each variety of bronze implement was designed tend to much more satisfactory results. When it is considered that the most expert and sagacious archæologist would probably be puzzled to determine the purpose of one-half the tools of a modern carpenter or lock-smith, it is surely assuming too much, when he stumbles on the hoarded weapons and implements of the old Briton, who has re-

[1] Archæological Journal, vol. iv. p. 327, Plate 1. fig. 1.

posed underneath his monumental tumulus, with all the secrets of his craft buried with him, for full two thousand years, to pretend to more than a very general determination of their uses. Much mischief indeed is done in the present stage of the science by such attempts at "being wise above that which is written." These relics are our written records of the old ages, and it is well that we should avoid bringing their chroniclings into discredit by forcing on them an interpretation they will not legitimately bear.

The capabilities of the new material introduced to the old workers in stone, were pregnant with all the elements of progress, and one of the most interesting features belonging to the Archaic Period is the gradual development of skill, inventive ingenuity, and artistic decorative fancy, in the series of bronze weapons and implements. The following examples found in Scotland, while they serve to illustrate this feature of progressive improvement, may also in some degree help towards the establishment of a fixed nomenclature; the want of which renders so many "Statistical" and other accounts of important discoveries utterly useless for all practical purposes.

The following is an attempt to define such a system of classification as the Scottish examples naturally admit of, assuming every additional improvement, complexity, or ornamentation as evidence of progress, and therefore of work of a later date.[1]

Class I. consists of bronze implements made apparently in imitation of the older ones of stone, and to which the name of Celt-axes may therefore be very consistently applied. Of these a very primitive specimen in the Scottish Museum is little more than an imperfectly squared oblong piece of yellow bronze, or "Celtic brass," full of air-holes, and evidently cast in sand. It was found in the Moss of Cree, near Wigtown, in Galloway. The analysis of another nearly similar to this, and found a few miles from Edinburgh, has been given in the previous chapter. To this class also have belonged the implements cast in the polygonal stone mould now in Belfast.[2] The simplicity of the mould completely corresponds with the primitive character of the manufactures in which it was employed; the axe-heads having been fashioned

[1] I have to acknowledge obligations in this attempt at classification to Mr. Dunoyer's valuable papers in the Archæological Journal, though adopting a different arrangement and terminology. In the present very imperfect state of the science, it is hardly to be looked for that any single system will satisfy all requirements, and prove of general acceptance. But an important point will have been gained when a fixed nomenclature has been established.

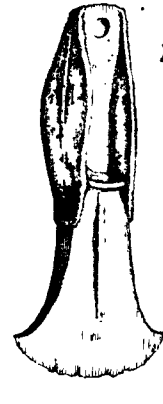
[2] Archæol. Jour. vol. iv. Plate vi. p. 335.

merely by pouring the melted metal into the exposed indentation in the stone, as the previous examples were moulded in an impression in sand.

Class II.—In this group may with considerable propriety be placed a peculiar class of bronze axes, of comparatively rare occurrence in Scotland, and apparently unknown in English collections, though frequently met with in Ireland. To these I would propose to apply the name of Spiked Axe. The accompanying woodcut, which represents one found along with other bronze relics at Strachur, Argyleshire, will convey a better idea of the peculiar characteristics of the second class of axes than any description. It might be taken for the normal type of the medieval battle-axe, which the mail-clad knights of the thirteenth century bore at their saddle-bow. The few examples met with almost invariably exhibit the same uniformity of thickness throughout, accompanied with an imperfect adaptation for hafting, so as to leave us in little doubt as to the true place of the spiked axe, first in order after its simpler prototype.

Class III. consists of axe-heads, not greatly dissimilar in general form to those of the first class, but larger, and exhibiting manifest evidence of the improvements of experienced workmen. For these the term Axe-blades, plain or incised, appears most suitable. They are sometimes finished with a broad flange along the sides, thereby securing at once economy of material with lightness and strength; and are, oftener than any other bronze relics, decorated with incised ornamental patterns corresponding to those which occur on the pottery of the same period. This kind of ornamentation, though frequently executed with considerable taste, presents a striking contrast to the graceful mouldings and perforations of the more advanced period. It appears to have been produced in the most simple manner, by striking the surface with a punch, sometimes (as in an example in the Scottish Museum, which measures $5\frac{3}{4}$ inches long) with no very marked attempt at a definite pattern. Others, however, are characterized by much more taste and evidences of design. The very fine specimen figured here, from a drawing by Sir Thomas Dick Lauder,

Bart., is like the former, of bright yellow metal. It was discovered in the year 1818, a few inches below the surface on the Moor of Sluie, and not far from the river Findhorn, Morayshire. Various interesting relics have been found in this locality. In the month of March, of the same year, a cist was uncovered on the moor, within which lay a bronze spear-head of the primitive type, 11¼ inches in length, and perforated with four holes for attaching it to a handle. The point is considerably corroded and imperfect, and was apparently above an inch longer when complete: beside it lay two unusually large bronze celt-axes, about half an inch thick, and six inches long. Drawings and a description of these were communicated to the Society of Antiquaries of Scotland at the time of their discovery, by Sir Thomas Dick Lauder, and are now preserved among the Society's MSS. Various examples of similarly ornamented axe-blades, in the Museum of the Royal Irish Academy, are engraved in the fourth volume of the Archæological Journal. A very beautiful and unique specimen, found in the county of Tipperary in 1843, and now in the collection of the British Museum, is figured in the sixth volume of the same Journal.[1] An English engraved axe-blade, of analogous type, found near Clare, in Suffolk, along with eighteen others of various sizes, and with several similarly ornamented, is figured in the Archæologia;[2] and a few other examples of this rare class of primitive decorated weapons, from various localities, are preserved in the British Museum. These incised lines are supposed by many to have been designed for use as well as ornament, and several allusions, by ancient Irish writers, to the employment of poisoned weapons by the Celtic natives, are referred to in confirmation of the probability that the indented patterns were wrought on the axe-blade to adapt it for retaining the poison with which it was anointed preparatory to the conflict. The rarity of the occurrence of such incised lines militates in some degree against this theory; but it will be seen hereafter that other devices of more frequent adoption may have answered the same barbarous and deadly purpose.



Class IV. includes a variety of the implements to which archæologists are now generally agreed in applying the old Scandinavian term Paalstab, or its recently adopted

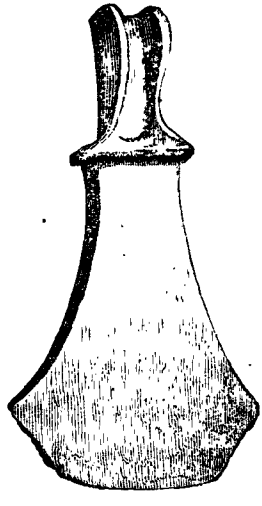
[1] Archæological Journal, vol. iv. p. 328; vol. vi. p. 410. [2] Archæologia, vol. xxxi. p. 497.

English synonyme, Palstave, originally designating a weapon employed in battering the shields of the foe. Their general characteristics partake more of carpentering tools than of weapons of war, but in this, as in many other instances, it is difficult to draw the distinction with any certainty, where the objects might be of equal avail for both purposes. The palstave consists of a wedge, more or less axe-shaped, having a groove on each side, generally terminating in a stop-ridge, by means of which it was united to a cleft haft, and with projecting lateral ridges, designed still farther to secure its hold on the handle. Various improvements on the primitive form have obviously been suggested by experience. The woodcut represents a fine example in the Museum of the Scottish Antiquaries, found on the farm of Kilnotrie, parish of Crossmichael, in the Stewartry of Kirkcudbright. The original measures $6\frac{3}{4}$ inches in length. Notwithstanding the axe-like shape of a few of the largest of these implements, I cannot but think that the idea of the mode of hafting them by means of a bent stick, as recently assumed,[1] appears forced and improbable. In all the additions, apparently suggested by experience, for the purpose of more effectually securing it to the handle, no single example has been found with a bent groove, a hollow socket or perforation, or any other of the most simple and obvious adaptations of the metal to such a purpose. It cannot for a moment be supposed that such an improvement was beyond the skill or ingenuity of the metallurgist. In the example figured here, the hole through the end appears to have been produced in the casting. The labour of hewing the mould, or hammering the palstave into the desired shape, with which the old worker in stone was already familiar, would scarcely exceed that involved in the adaptation of each wooden haft. Mr. James Yates has suggested, in an ingenious communication to the Archæological Institute, that one of the most important uses to which bronze celts were applied was in destroying fortifications, entrenchments, and similar military works.[2] In illustration of this the author engraves two examples from the Nimroud Marbles, in which Assyrian soldiers are seen breaking through a wall of brick or small stones, by means of chisels not greatly dissimilar to our bronze celts, but fitted to a straight wooden handle. For such operations many of the larger palstaves would be no less suitable. The one here figured, from the original, measuring $7\frac{1}{2}$ inches in length, in the valuable collection formed by Sir John Clerk at

[1] Archæol. Journal, vol. iv. p. 4.

[2] Archæol. Journal, vol. vi. p. 363.

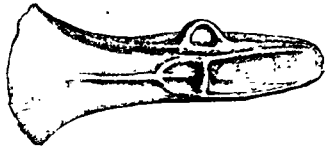
Penicuick House, seems peculiarly adapted for the purpose. Mr. Yates accordingly arrives at the conclusion, that "wherever we should now use the spade, the crow-bar, or the pick-axe, the ancients used the palstave or the hollow celt, fastened to a straight wooden shaft; and this was the practice, not only of the Romans, but of the Greeks and Macedonians, the Hebrews, Assyrians, and Carthaginians, and of all nations to which they extended the knowledge of their arts, or which were sufficiently advanced in civilisation to dwell in fortified places."[1] This farther conclusion inevitably follows, if we adopt the ingenious theory of Mr. Yates,—that the Britons of the Bronze Period had advanced to a similar state of civilisation; nor is it inconsistent with the ideas we are led to form of their skill and progress in the arts, that they had already reared the ingenious earth-works which still crown the summit of many a height both in England and Scotland. Against such works, however, even the largest of the bronze palstaves would prove but an inefficient implement, whether used as a crow-bar or hatchet, and if employed as a spade, the most of them would be of somewhat less avail than an ordinary tablespoon! It is not always easy to discriminate unhesitatingly between the true axe-head and the palstave. In many examples, where the general shape is completely that of the axe-blade, both the stop-ridge and side flanges are formed, while the narrow palstave no less frequently wants the stop-ridge. In Sir Robert Sibbald's History of Fife and Kinross, one of the latter class of palstaves is engraved, with a broad double flange, evidently adapted for insertion in a cleft handle, and which he has entitled a "brass axe found in a cairn of stones." Numerous other examples have been discovered under similar circumstances, leaving no room to doubt of their native origin, or of the estimation in which they were held by their primitive owners.



Class V. includes an improved variety of palstaves having a loop or ear attached to them, and in many instances the sides overlapping to a considerable extent, occasionally so much so as to meet, and

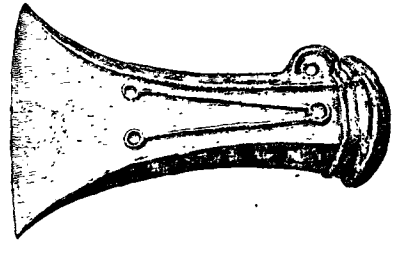
[1] Archæological Journal, vol. vi. p. 392.

form a perforation or socket for receiving the handle. In this class the overlapping flange is often only on one side, especially where it is turned over so as to form a socket; but in no example which I have examined is there any adaptation of it properly suggestive of the assumed theory of a bent handle, designed to admit of its use as an axe. If such was its mode of hafting, it exhibits a degree of clumsiness and inefficiency very inconsistent with the numerous traces of inventive skill and ingenuity observable in other relics of the same period. The example figured here is from one found in draining a field to the west of Blackford Hill, near Edinburgh. It is of the most common form, and measures $5\frac{3}{4}$ inches in length.



Class VI. consists of the unlooped Bronze Celt, which is of comparatively rare occurrence in Scotland, though frequently met with in Denmark. It differs only from the more common celt in the absence of the loop; but it is generally of a small size, and is never found of the proportions of the largest British celts.

Class VII.—The Bronze Celt is the most common of all the relics of this period, found of various sizes and degrees of ornament, from the plain small celt of scarcely an inch and half, to those of five and six inches long, fluted, and encircled with mouldings or cable-pattern borders, and ornamented with incised lines and embossed figures on the blade. In Sir Robert Sibbald's Portes, Coloniæ, &c., a Scottish example of the engraved celt is figured, with its blade decorated with the herring-bone pattern, in the same style, and perhaps with the same object as has been assumed for the origin of the incised axe-blades of the period. Examples of engraved celts are of much rarer occurrence than axe-blades, if indeed this one is not unique.[1] The use of the loop so generally attached to the bronze celt, as well as to one class of the palstaves, has been a subject of scarcely less industrious speculation than the probable purpose of the implement itself. The idea which has been repeatedly



[1] Portes, Coloniæ, &c. 1711. Tabula III. fig. 5 et 6.

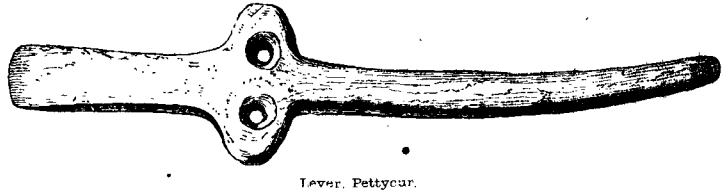
suggested of its design as a means of securing the celt, as an axe-head, to a bent shaft, is scarcely less unsatisfactory than in the previous class of looped palstaves. If it was used with a thong or cord, the fastening would be so readily exposed to injury, while at the same time it so imperfectly accomplished the object in view, that it appears altogether inconsistent with the general manifestation of ingenuity and skill in the workers in metal to conceive of them adhering to this clumsy device. The unique specimen found at Tadcaster, with an oval bronze ring attached to the loop, and a small ring or bead of jet upon it, so far from confirming such a theory, seems much more consistent with its use as a means of suspension or of securing a number together for convenient deportation.[1]

Such is an attempt to assign a consistent classification and nomenclature to a variety of bronze implements, hitherto most frequently described by British archæologists under the general name of Celts,—a matter perhaps of no very great moment, yet at least calculated to give facility and precision to future descriptions of the discovery of similar objects, and thereby to render such observations of greater avail to the archæologist. They are all more or less applicable to a variety of uses, both as mechanical tools and warlike weapons; and it is not improbable that in entering upon any very nice attempts at discriminating between the various purposes for which they were designed, we shall only ingraft on the products of primitive art a subdivision peculiar to modern civilisation. At a period much nearer our own time the same implement sufficed the Scottish border trooper for table-knife, couteau de chasse, and dagger; and it seems most probable that the older Briton carried the same bronze axe with him to battle with which he waged war against the giant oaks of his native forests. It is a matter worthy of note, however, and calculated to excite in us some surprise, that no bronze axe has yet been discovered, if I mistake not, either in Britain or Ireland, with a perforation through it,—the simplest of all means of securing it to a handle, and one which was already familiar to the workers in stone. The following description might indeed lead to a different conclusion, if we could depend on the strict use of the terms employed:—"On the banks of the Cree, in Galloway, there were several tumuli. In some of these, when they were opened in 1754, there were found the remains of weapons of brass, which were very much corroded. One of these was

[1] *Vide* Note, Archæological Journal, vol. vi p. 376.

formed like a halbert; another was shaped like a hatchet, having in the back part an instrument resembling a paviour's hammer. A third was formed like a spade, but of a much smaller size, and each of these weapons had *a proper aperture for a handle.*"[1] Unfortunately the researches of the Scottish archæologist are continually arrested by such tantalizing descriptions, conveyed in vaguest terms, and with no accompanying illustrations to help him to the true character of the objects; leaving him to mourn the apathy of Government, which refuses all aid to those who are striving to arrest such fleeting records of the past, and deposit them, where alone they ought to be, in national museums.

Numerous other weapons and implements, of the same metal and character of workmanship, have been found in the Scottish tumuli, or in the chance hoards of bogs or alluvial deposits. Bronze gouges and chisels are among the most common of these, though hitherto apparently less frequently noted in Scotland than in England and Ireland. Of rarer implements of the same era, the bronze crowbar, or lever, represented in the annexed woodcut, half the length of the



Lever, Pettycur.

original, is, I think, unique. It was found in 1810, in a barrow near Pettycur, Fifeshire, and is now in the collection of the Hon. James Talbot. It is figured in the Archæological Journal, in illustration of Mr. Yates's communication on the use of bronze celts in military operations, and is described as very strong.[2] Its longer end, bent perhaps accidentally, seems intended to be fixed in a stout handle of wood, to which it could be firmly secured by the perforated wings. Mr. Yates adds in describing it:—"The circumstance of its discovery in a barrow is an evidence that it was used for some military purpose,

[1] Caledonia, vol. i. p. 81.

[2] I am indebted for the use of this woodcut to the Council of the Archæological Institute, with the courteous permission of Mr. Yates, by whom it was originally contributed to the Archæological Journal.

for barrows were not the tombs of agriculturists, gardeners, masons, or carpenters, but of chiefs and warriors." But in making use of such an argument it may be doubted if we are not applying the results of modern civilisation as the standard of primitive ideas. Most probably the greatest chief of the early Bronze Period was in many cases also the best mason, carpenter, and military engineer, and the most skilful worker in metals,—the literal chief, in fact, and true Teutonic *king*, or most knowing man of his tribe. Perhaps a better argument is to be found in the frequent decoration of the bronze celt. There is a sense of fitness in all minds, and most surely developed in the primitive stages of civilisation, where it acts intuitively, which teaches man to reserve the decorative arts for objects of luxury and pleasurable enjoyment,—then including war and the chase,—but not to expend them on tools of handicraft and implements of toil.[1]

The variety of lance and spear-heads is no less characteristic of the gradual progress of the primitive worker in bronze, from the imitation of the rude types of his obsolete stone weapons, to the production of the large and beautiful myrtle-leaf spear-heads, finished with the most graceful symmetry, and fully equal in character to the finest medieval workmanship. The earliest examples are mere pieces of hammered metal, reduced to the shape of a rude spear-head, but without any socket for attaching them to a shaft. They manifestly belong to the primitive transition-period, in all probability before the northern Briton had learned to smelt or mould the newly introduced metal. Lance and arrow-heads of the same form, or slightly improved by being made somewhat in the shape of the barbed flint arrow-head, are also preserved in the Museum of the Scottish Antiquaries; and a curious example of the spear-head of the latter type, measuring 10½ inches in length, is engraved in the Archæological Journal.[2] It was found in 1844 by some workmen while dredging in the bed of the Severn, about a mile and a half below Worcester, and is made, like so many others of the simpler forms, of metal of very bright colour and hard quality, in appearance more nearly resembling brass than bronze. Others of the earlier forms of bronze spear-heads

[1] *Vide* Bibliotheca Topog. Brit. vol. ii. Part 3, for an interesting correspondence on the *questio vexata* of the origin and use of bronze celts, on which so much ink has been spilled to very small profit. The correspondence includes an account of the singular discovery at Alnwick, in 1726, of twenty bronze swords, sixteen spear-heads, and forty-two bronze celts, and anticipates, to very good purpose, much which has been written at greater length since.

[2] Vol. ii. p. 187.

are perforated with holes at the broad end, and not unfrequently retain the rivets by which they have been attached to the shaft. A spear-head of this class, in the Museum of the Scottish Antiquaries, measuring $14\frac{3}{4}$ inches in length, has been secured by three large rivets, two of which still remain. A drawing by Sir Thomas Dick Lauder, in the collections of the Society, preserves the figure of another of the same type, but with four rivets, found in a cist on the moor of Sluie, Morayshire, in 1818. A third example, closely resembling the last, and found on the Eildon Hills, Roxburghshire, is in the Abbotsford collection.[1] They have been cast, but obviously by workmen chiefly familiar with the older forms of flint and stone. This class of weapons, or Spear-blades, as they may be termed, is by no means rare.

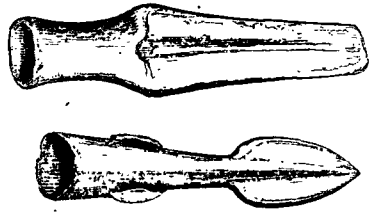
The earlier implements, chiefly constructed in imitation of the primitive stone models, were intended, for the most part, to be secured to the shaft by means of cords or leather thongs. But the worker in the new material soon learned its capabilities. The hollow socket was speedily superadded, generally accompanied with a projecting middle ridge to strengthen the weapon, and admit of its receiving more readily an acute edge and point. To these again were added the double loops, designed apparently for still further securing it to the shaft; and with this addition the merely useful and essential features may be supposed to terminate, though there is considerable variety in the forms which spear-heads of this class display. The most common and graceful shape might seem to be borrowed from the myrtle leaf. Several are engraved in Gordon's Itinerarium Septentrionale, (*Plates* L. and LI.,) from the collection of Sir John Clerk of Penicuick, including some interesting varieties. One, of very rude form, and which the author of course styles *Roman*, was found under a cairn in Galloway. Another, curiously incised with alternate chequers of diamond shape, is described as a *hasta pura*. A spear-head, decorated in the same style, though with a different pattern, was found near Bilton, Yorkshire, along with a quantity of other bronze weapons, in 1848.[2] But the most singular of all the "several sorts of *hastæ or Roman spears*," as Gordon delights to call them, is one figured on *Plate* LI., No. 6, of the Itinerarium, and which may be most fitly described as fiddle-shaped.[3] Neither of these remarkable examples is now to be

[1] It is figured in the Antiquary, Abbotsford Edition, vol. ii. p. 17.

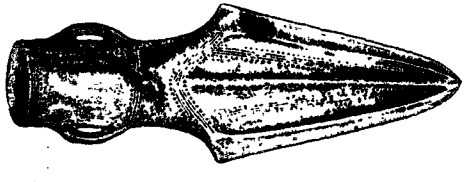
[2] Journal of the Archæol. Association, vol. v. p. 349.

[3] Itinerar. Septent. p. 117.

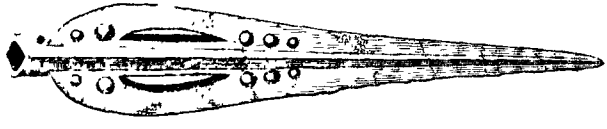
found in the Penicuick collection. The woodcut represents a spear-head with two loops, which is one of the very commonest forms of the smaller class of Scottish bronze spears, most generally of the bright yellow metal, apparently peculiar to Scotland and Ireland. The other is a singular form of socketed spear, differing from any example I have met with elsewhere. It was found, along with various other bronze weapons and implements, in a moss near Campbeltown, Argyleshire, and is now the property of J. W. Mackenzie, Esq. It measures nearly seven inches in length, by one and a half inch in greatest breadth, and is covered with verd antique.



A very great variety is now discernible in the weapons of the period. The metallurgist had at length mastered the new art, and was rapidly advancing in taste as well as skill. His inventive powers supplied constant novelty in the multiplication of new forms and ornamental devices. The woodcut represents a very fine double-looped spear-head, five and two-fifth inches long, found near the river Dean, Angusshire, and now in the collection of Mr. Bell of Dungannon. Javelin and spear-heads, decorated with similar indented ornaments, have been met with both in Scotland and Ireland. The larger spear-heads also now occur "eyed," as it is termed, or perforated with a variety of ornamental openings, frequently surrounded with a raised border, and otherwise decorated according to the fancy of the designer. Among the broken and half-melted arms dredged out of Duddingstone Loch are numerous fragments of such Eyed Spear-heads, and several very beautiful perfect specimens are preserved in the Museum of the Scottish Antiquaries, as well as at Abbotsford, and in other private collections. They are extremely various in form, exhibiting such a diversity of design even in the simple patterns, as well as of ornamental details in the more elaborate ones, as amply to con-

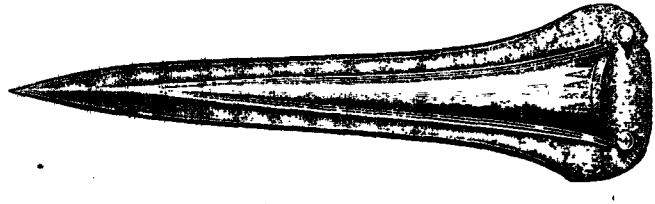


firm the idea suggested by so many remains of the bronze period, that these relics were the products of no central manufactory, much less the importation of foreign traders, but were designed and moulded according to the taste and skill of the local artificer, most frequently for his own use. One remarkable feature in the largest and most elaborate of those in the Scottish Museum, represented in the annexed engraving, abundantly confirms the system of classification



which gives it place among the later products of the Bronze Period. It measures fully nineteen inches in length, and was found on the lands of Denhead, in the parish of Cupar-Angus, Perthshire, about the year 1831. The bronze, like that of many other works of the same period, is extremely brittle, and the spear-head is broken and imperfect. One of the fractures near the point of the blade shews that a thin rod of iron has been inserted in the centre of the mould to give additional strength to this unusually large weapon, and suffices to connect it with the second transition-period, when the bronze was giving way to the more useful and abundant metal which now nearly supersedes all others in the useful arts. Of the simpler forms of the eyed or perforated spear, one of the most common is pierced with two segmental openings placed opposite to each other, or more rarely disposed irregularly so as to convey somewhat the appearance of an S or ogee perforation. I am indebted to Mr. Albert Way for a sketch of a very fine example of the former type, found at Ardersier Point, Inverness-shire, about 1750. It measures in length fourteen inches by two and three quarters in greatest breadth. This remarkably fine specimen was discovered in a tumulus lying by the side of a human skeleton. A similar spear was found in Northumberland in 1847, along with a bronze sword and other relics; the whole of which are now in the possession of the Hon. H. Liddell. But the eyed spear-head, which is common both in Scotland and Ireland, appears to be of rare occurrence in England, and is, I believe, unknown among the native antiquities of Denmark, though it has been so long the fashion with Scottish and Irish antiquaries to assign to these relics a Scandi-

navian origin. The Scottish bronze dagger of the same period is almost invariably found to consist of a two-edged blade, tapering to a point, and perforated with two or more holes for attaching a handle to it by means of rivets, but without the simpler, and, as it would seem, more obvious and secure fastening of a prolongation of the broad end of the blade for inserting into a haft. These weapons are also occasionally found elaborately ornamented, according to the prevailing style of the era. They generally retain the bronze rivets, thereby shewing that the handles had been of wood or horn, and not of metal, as is most frequently the case with the swords and daggers of the same era found in Denmark. The annexed figure represents a fine example of the Scottish bronze dagger, found at Pitcaithly, Perth-



shire, and now in the valuable collection of Mr. Bell of Dungannon. It measures fully six inches in length, by two inches in greatest breadth.

But the most characteristic and beautiful of all the relics of the Bronze Period is the leaf-shaped sword, which has been frequently found with both point and edge as sharp as when it first was used. The examples already referred to, which were found, in 1846, on the south side of Arthur's Seat, near Edinburgh, during the construction of the "Queen's Drive," are equal to any that could be produced. The largest of the two is one of the finest ever found in Scotland, measuring twenty-six and a quarter inches in extreme length, and one and three quarter inches at the broadest part of the blade. The form is exceedingly simple, though graceful and well proportioned; but a small engraving conveys a very imperfect idea of the weapon when held in the hand.[1] The section of the sword shews the art with which it is modelled, so as to secure the indispensable requisite of strength along with a fine edge, the blade swelling in the middle, and tapering off towards the line which runs round the entire blade within the edge. The metal is indeed too soft, apparently, to retain a sharp

[1] *Ante*, p. 228.

edge, or to resist the contact with any hard body; but it has been found that when this alloy has been cast into such forms, if the edge be hammered till it begins to crack, and then ground, it acquires a hardness, and takes an edge not greatly inferior to the ordinary kinds of steel. Several of the bronze swords in the Scottish Museum are broken in two, and some of them imperfect, most of such having been found with sepulchral deposits. One of these was discovered, alongside of a cinerary urn, in a tumulus at Memsie, Aberdeenshire. Another was found, lying beside a human skeleton, in a cist under Carlochan Cairn, one of the largest sepulchral cairns in Galloway, which formerly stood on the top of a high hill on the lands of Chappelerne, parish of Crossmichael. It was demolished in the year 1776 for the purpose of furnishing materials to inclose a plantation. From such discoveries we are led to infer that one of the last honours paid to the buried warrior was to break his well-proved weapon and lay it at his side, ere the cist was closed, or the inurned ashes deposited in the grave, and his old companions in arms piled over it the tumulus or memorial cairn. No more touching or eloquent tribute of honour breaks upon us amid the curious records of ages long past. The elf-bolt and the stone axe of the older barrow, speak only of the barbarian anticipation of eternal warfare beyond the grave: of skull-beakers and draughts of bloody wine, such as the untutored savage looks forward to in his dreams of heaven. But the broken sword of the buried chief seems to tell of a warfare accomplished, and of expected rest. Doubtless the future which he anticipated bore faint enough resemblance to the "life and immortality" since revealed to men; but the broken sword speaks in unmistakable language of elevation and progress, and of nobler ideas acquired by the old Briton, when he no longer deemed it indispensable to bear his arms with him to the elysium of his wild creed.

This graceful custom would appear to have been peculiar to Britain, or it has escaped the attention of northern antiquaries. Mr. Worsaae makes no mention of it in describing corresponding Scandinavian weapons, but rather seems to imply the opposite when thus referring to a later period,—"Skilful armourers were then in great request, and although in other cases the Danish warrior would have thought it unbecoming and dangerous to disturb the peace of the dead, he did not scruple to break open a barrow or a grave, if by such means he could obtain the renowned weapon which had been deposited beside the

hero who had wielded it."[1] Thus we learn that from the remotest times even to our own day, the northern warrior has esteemed his sword the most sacred emblem of military honour. In later ages the leaders of medieval chivalry gave names to their favoured weapons, the Trobadours celebrated their virtues with all the extravagance of Romaunt fable, and still the soldier's favourite sword is laid on his bier when his comrades bear him to his rest.

Associations with these ancient weapons of an altogether different nature have been suggested, chiefly in consequence of some resemblance of the indented mouldings on the bronze swords to the ribs and grooves frequently found on the modern Malay Creess. The design of the latter, it is well known, is to retain poison, and it has been supposed, not without some appearance of evidence, that such practices were not unknown to the ancient Caledonian. This has been already referred to as the purpose which perhaps first suggested those rude incised lines on the earlier axe-blades, afterwards turned to account as a means of tasteful decoration. In the ancient Irish poem on the death of Oscar, printed in the first volume of the Royal Irish Academy's Transactions, the spear of Cærbre is said to be poisoned, seemingly in no figurative sense. The era of the bronze sword is of an earlier date; but notwithstanding the graceful symbolism apparent in some of the sepulchral rites, we have little reason for assuming that there was anything in the degree of civilisation attained by the Briton of that period incompatible with such savage practices.

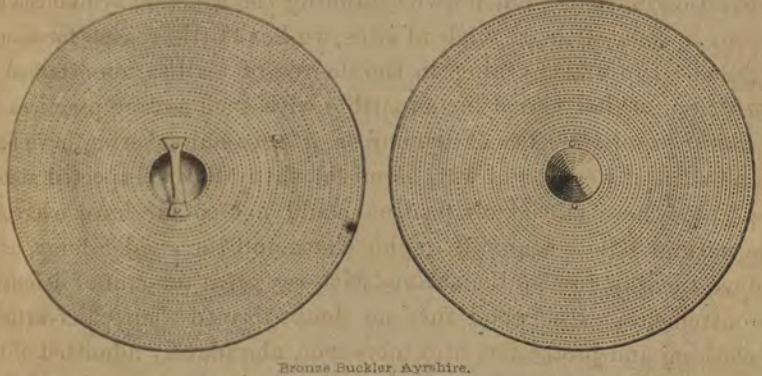
Fewer primitive relics of armour or of personal covering have been found than of weapons of war, as might naturally be expected among a people whose partial civilisation could not so far have overcome the natural habits acquired in the chase and the sudden foray, as to induce them to cumber themselves with any great amount of defensive accoutrements. Skins and furs no doubt formed their chief articles of clothing and protection, and moreover, abundantly admitted of the degree of ornament which the taste indicated in the decoration of their weapons would lead them to aim at.

Helmets or head pieces of any kind belonging to the native Pagan era are of extremely rare occurrence. In a tumulus at Drimnamucklach, Argyleshire, pieces of a rudely adorned bronze helmet were found, and are now in the possession of Mr. Campbell, the proprietor of the estate. Gordon describes another example found in a cairn,

[1] Primeval Antiquities, p. 49.

near the water of Cree, Galloway, but it was so cracked and brittle, and probably also so rudely handled, that it fell to pieces on being removed.[1] There is every reason to believe that this piece of defensive armour was not generally used among the native Britons, nor indeed among the Scandinavian warriors of the Bronze Period. Only one imperfect fragment of a bronze helmet exists in the ample collections of the Christiansborg Palace at Copenhagen. Diodorus refers to the brazen helmet of the Gauls, but both Herodian and Xiphiline speak of the Britons as destitute of this defensive head-piece. Their matted locks, which they decorated with the large and massive hair-pins of gold, silver, or bronze, so frequently found with other relics, sufficed them alike for protection and ornament. This custom was probably common to all the northern races. But the indispensable defensive armour of the old British warrior was his shield, frequently made entirely of bronze or of wood covered with metal, and sometimes adorned with plates of silver and even gold.

The ancient bronze shield is of common occurrence both in Britain and Ireland, and forms one of the most ingenious specimens of primitive metallurgic art. In 1780 a singular group of five or six bronze



Bronze Buckler, Ayrshire.

bucklers was discovered in a peat moss, six or seven feet below the surface, on the farm of Luggtonrigge, near Giffin Castle, Ayrshire. The shields were regularly disposed in a circle, and one of them, which passed into the possession of Dr. Ferris, was subsequently presented

[1] Itiner. Septent. Appendix, p. 172. Two helmets are said to be preserved by Lord Rollo at Duncruib House, Perthshire, which were dug up in the neighbourhood along with various bronze relics. *Vide* New Statistical Account, vol. x. p. 717.

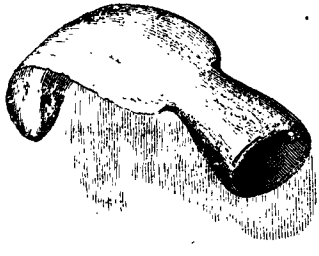
by him to the Society of Antiquaries of London. It has a semi-globular umbo, surrounded by twenty-nine concentric rows of small studs, with intervening ribs, and measures 26¾ inches in diameter.[1] Like all the primitive British bucklers, it will be seen that it was designed to be held in the hand, the raised umbo in the centre being hollow to receive and protect the hand where it grasped the cross bar, seen on the under side in the annexed engraving. The central umbo is surrounded with a series of rings of bronze set with small studs, and the two pins seen on the inner side have perhaps secured a strap for suspending it to the neck of the wearer when not in use. In 1837 two remarkably fine bronze shields of this description were exhibited to the Society of Antiquaries of Scotland by Mr. George Wauchope of Niddry, which were found near Yetholm, about eight miles from Kelso, at a depth of four feet, by a labourer engaged in digging a drain. Sir Robert Sibbald describes among Scottish antiquities obtained on the sites of ancient camps, "pieces of harness of brass: some for the arms and some for the legs. Shields also are found; some oblong and oval, and some orbicular. Some of these are of brass and some of wood full of brass nails."[2] It is probable that many of the shields of the same period were made chiefly of wood and leather, with the central umbo of bronze; the latter being occasionally discovered alone in barrows. In the circular Highland target, which is still to be met with among collected relics of the clans, we find a curious example of the imitation of the earlier model of the Bronze Period. Though the Roman example of wearing the shield on the arm has been followed by the Scottish mountaineer, rendering the hollow umbo no longer of use, yet it appears to the last in the boss of his target, furnishing another striking proof of the unreasoning tenacity with which the Celtic races are found to cling to ancient customs.

Among the specimens of defensive armour preserved in the Museum of the Scottish Antiquaries, are two pieces of thin copper, decorated with indented ornaments, which were presented to the Society by Sir George Mackenzie of Coull, Bart., in 1828. They are described by the donor as pieces of copper, supposed to be plate armour, or the covering of a shield, found in a cairn, under an oak tree at Craigdar-

[1] Catalogue of Antiquities, &c., Soc. Antiquar. Lond. 1847, by Albert Way, Esq. p. 16. Mr. Way adds in a note, "The description of the shield found in Ayrshire, as given in the minutes, corresponds with the buckler now in the Society's possession in every particular, with the exception of the diameter, which is stated to have been about 15¼ inches, possibly an error of transcript."

[2] Portes, Coloniæ, &c., App. pp. 17, 18.

roch, Ross-shire. Various other portions were found along with these, and their appearance seems fully to justify the supposition of the donor. In the autumn of 1849 a remarkable discovery of bronze arms and other antiquities was made in the Isle of Skye. They included swords, spear-heads, celts, and a bronze pin with a hollow cup-shaped head similar to one figured in the Archæological Journal, a relic of one of the Irish Crannoges, or island strengths.[1] A gold armilla and other ornaments of the same precious metal are also said to have been obtained along with these ancient remains, and beside them lay the fragments of an oaken chest in which the whole appeared to have been deposited. The most of these valuable relics were secured by Lord Macdonald, but one curious and probably unique implement fell into private hands, and has since been deposited in the Museum of the Scottish Antiquaries. In general appearance it resembles a bent spear-head; but it has a raised central ridge on the inside, while it is nearly plain and smooth on the outer side. It has a hollow socket, and is perforated with holes for securing it to a handle by means of a pin. The most probable use for which it has been designed would seem to be for scraping out the interior of canoes and other large vessels made from the trunk of the oak. But we necessarily reason from very imperfect data when we ascribe a specific purpose to the implements of a period the arts and habits of which must have differed so essentially from our own.



Another class of bronze implements not uncommon in Ireland, and occasionally mentioned among those discovered in Scotland, includes what are generally described as reaping or pruning-hooks. One of these, which was found at a depth of six feet in a bog in the neighbourhood of Ballygawley, county of Tyrone, now preserved in the British Museum, is figured in the Archæological Journal.[2] Another engraved in General Vallancey's Collectanea,[3] is described as "a small securis, called by the Irish *searr*, to cut herbs, acorns, misletoe, &c." About the year 1790, a similar instrument was discovered at Ledberg, in the county of Sutherland, by some labourers cutting peats, and was pronounced by the Earl of Bristol, then Bishop of Derry, to whom it was presented, to be a Druidical pruning-hook, similar to several

[1] Vol. iii. p. 48. [2] Vol. ii. p. 186. [3] No. 13, Plate x. fig. 4.

found in England.[1] Perhaps among the same relics of primitive agricultural skill ought also to be reckoned a curious weapon or implement of bronze, occasionally found in Scotland, two examples of which are figured here. One of them is from the original in the Museum of the Scottish Antiquaries. It was found among the remains of many large oak trees, on the farm of Rottenmoss or Moss-side, in the vicinity of Crossraguel Abbey, Argyleshire, and is not inaptly described by its donor as nearly resembling one of the common forms of the Malay Creess. It measures fourteen inches in length. The other and more finished implement of the same kind is in the collection formed by the distinguished Scottish antiquary, Sir John Clerk, at Penicuick House. It is furnished with a hollow shaft or socket for the handle. The same interesting and valuable collection includes other specimens of this primitive implement, constructed like that in the Museum of the Scottish Antiquaries, with only a metal spike for insertion into the haft. Some examples of this relic of old agricultural skill are of extremely small dimensions, measuring only from six to eight inches in the length of the blade, and should perhaps more correctly be described as pruning-hooks or knives. But in this, as in so many other attempts to assign a use to obsolete implements, the most probable suggestions of their original purpose are at best but guesses after the truth.

[1] Sinclair's Statist. Acco. vol. xvi. p. 206.

CHAPTER V.

DOMESTIC AND SEPULCHRAL VESSELS.

Along with the weapons and implements of this period there have also been found at various times drinking cups, culinary vessels, horns, and other similar relics calculated to throw some additional light on the manners and domestic habits of the people by whom they were wrought and used. There have not indeed been discovered, or at least preserved, among the sepulchral deposits or the chance disclosures of the Scottish bogs and alluvial strata, anything to be compared with the celebrated Danish golden horns, or the beautiful silver cups of a later era, such as that taken from the grave of Queen Thyre Danebod, at Jellinge in Denmark. There are not wanting, however, undefined but not the less certain traces of the like costly memorials of primitive native art, discovered only to be destroyed. On the lands of Garthland, Wigtownshire, two vessels made of gold, and described as lachrymatories, were discovered in 1783.[1] At the village of Lower Largo, Fifeshire, a treasure was found in a sepulchral deposit, sufficient it is believed to enrich the original finder. The only relics which escaped destruction are two armillæ of pure gold, and remarkable for their elegance and skilful workmanship.[2] In 1839 a tenant engaged in levelling and improving a field on the estate of Craigengelt, near Stirling, opened a large circular cairn, which bore the popular name of "The Ghost's Knowe." It measured exactly 300 feet in circumference, and nearly fifty feet in height, and around its base twelve large stones were disposed at regular intervals. Underneath this cairn a large cromlech or stone chamber was found,

[1] Sinclair's Statist. Acco. vol. ii. p. 56.

[2] Archæological Journal, vol. vi. p. 53.

the upright stones of which were about five feet high, and within it lay a skeleton, imbedded in matter which emitted a strong resinous odour, but the bones rapidly crumbled to dust on exposure to the air. The gentleman on whose estate this remarkable cairn stood,[1] and to whom I am chiefly indebted for its description, had given strict orders to send for him if a cist or coffin was discovered; but while operations were delayed in expectation of his arrival, one of the labourers plundered the hoard and fled. Many valuable articles are reported to have been found; among which was a golden horn or cup, weighing fourteen ounces, and ornamented with chased or embossed figures. This interesting relic was purchased from one of the labourers by a gentleman in Stirling, and is believed to be still in existence, though I have failed, after repeated applications, in obtaining access to it. The exact nature or value of the whole contents of this cairn is not likely ever to be ascertained. The only articles secured by the proprietor, and now in his possession, are a highly polished stone axe or hammer, eight inches long, rounded at one end, and tapering at the other; a knife or dagger of the same material, eighteen inches long, which was broken by one of the stones falling on it when opening the cist; and a small gold finger ring, chased and apparently originally jewelled, though the settings have fallen out. Several other large cairns still remain unexplored at Craigengelt, some of them of much larger dimensions than the one which yielded such interesting results. English tumuli and primitive deposits have occasionally furnished still more valuable gold relics; such as the native gold corslet found in Wales, now in the British Museum.[2] Golden vessels have also been found under similar circumstances, as in a cairn near the Cheese Wring, in Linkenhorne parish, Cornwall, which was accidentally broken into in 1818, and a gold cup found lying beside the sepulchral remains. It was opened by some miners, who had selected the mound as an appropriate site on which to erect an engine-house. Within the cairn was a large cromlech, and underneath this lay a flat stone measuring nine feet long by about four broad, which covered the sepulchral deposit. In this chamber a thin slab, placed in a shelving direction against one of the sides, protected its valuable contents from injury. The remains of a skeleton lay extended on the floor of the

[1] John Dick, Esq. of Craigengelt.

[2] Archæologia, vol. xxvi. p. 422. *Vide* also Walker's Hist. Essay on the Dress of the Ancient Irish, (Dublin, 1788,) for a notice of a gold corslet, found near Lismore, and sold to a goldsmith at Cork for £600.

cist, and about the position of the breast stood an earthen vessel, within which was placed the gold cup. It is bell-shaped and rounded below, like the Danish gold cups found under similar circumstances and engraved in the "Guide to Northern Archæology." The earthen vessel was unfortunately broken by the fall of the stone that covered it, but its fragments exhibited the usual incised ornamentation of the early British pottery. A bronze spear was likewise found with these remarkable relics. The gold cup was claimed for the Crown as Lord of the Duchy of Cornwall, and it is believed to be still at Windsor Castle.[1] It would find a more appropriate place in the long desiderated British department of the British Museum.

As we cannot doubt but that these buried records of primitive native history have as yet been only very partially disclosed, so also we may hope that the rarer and more curious relics of the precious metals are also unexhausted, and that golden horns and silver beakers, adorned with the well-defined decorations of the Archaic era of native art, may still lie safely garnered in the same store-house and registry from whence so many historic records have been drawn forth, reserved for better times, when their discovery shall no longer involve their destruction. It will be seen from the number and variety of personal ornaments of the same precious metals described in future chapters, that such ideas are not mere chimerical dreams. Whencesoever the metal was derived, gold appears to have been used in Scotland to a very great extent, from the earliest period of the introduction of the metals, and to have been frequently deposited in the sepulchres of the most honoured dead, with no fear that sacrilegious hands would disturb the sacred deposit.

Vessels of bronze are by no means so rare as those of the precious metals. They are not indeed often found in the tumuli, and have obviously been held in less esteem than the weapons and personal ornaments of the same metal. But among the interesting disclosures brought to light by the draining of bogs and lakes, and the ordinary processes of agriculture, no class of relics have been more frequently discovered than the various culinary and domestic utensils of bronze, generally known by the names of Roman tripods and camp-kettles. Some of these do undoubtedly belong to the Anglo-Roman era; but the whole have been much too indiscriminately assigned to the legionary invaders and colonists, whose occupation of Scotland

[1] MS. Letters, W. T. P. Shortt, Esq. of Heavitree, Exeter.

was equally brief and partial, and whose relics must therefore form a very small proportion even of those of the later period to which they belong.

In the "Account of the Dominion of Farney," by Evelyn Philip Shirley, Esq., an engraving is given of a singular cauldron, made with considerable taste and skill, of plates of hammered bronze, rivetted together with pins of the same metal, the heads of which are conical in form, and being regularly disposed, serve to decorate as well as to secure the vessel. Two bronze rings are fastened to the inside of the rim by ornamental staples, and with these it was obviously designed to be suspended over the fire. This remarkable relic, which measures sixty inches in widest circumference, was discovered in the year 1834, at a depth of twelve feet below the surface of a bog, in the barony of Farney, Ulster. Bronze rings and staples, similar to those attached to this ancient cauldron, have been frequently found in Scotland. One of them has been already referred to, which was dredged out of Duddingstone Loch, near Edinburgh, along with a large quantity of bronze arms. Several others are preserved in the Museum of the Scottish Antiquaries, two of which (measuring each $4\frac{3}{4}$ inches in diameter) were found along with the bronze cauldron here represented.

Bronze Cauldron, Kincardine Moss.

Its dimensions are twenty-five inches in greatest diameter, and sixteen inches in height. No question can exist of its native workmanship. The rings and staples are neatly designed, but rudely and imperfectly cast and finished, and are decorated exactly as those of the Farney cauldron. The circles embossed on the side of the vessel are

in like manner such as have been frequently noted on objects of the Bronze Period, both in Britain and on the Continent. Nevertheless, in accordance with the classical system of designation which is even yet only partially exploded, this remarkable native relic figures in the printed list of donations in the Archæologia Scotica as a Roman camp-kettle. It was dug up in the year 1786, from the bottom of the peat-moss of Kincardine, some miles west from Stirling, where it was discovered lying upon a stratum of clay beneath the moss, which generally ranges from seven to twelve feet deep. Evidence has already been referred to which leads to the conclusion that the moss of Kincardine was in the same state at the period of Agricola's invasion as it continued to be till nearly the close of the eighteenth century. A curious allusion to this locality, in Blind Harry's Life of Sir William Wallace, which refers to the moss as incapable of passage on horseback, leaves us in no doubt as to its condition in the fourteenth century. After Wallace and his adherents had surprised an English garrison in the Peel of Gargunnoch,

> "Yai bownyt yaim our Forth for to ryde;
> The moss was strang, to ryde yaim was na but,
> Wallace was wycht, and lychtyd on hys fute;
> Stewyn of Irland he was yair gyd that nycht
> Towart Kincardyn, syne restyt thar atright,
> In a forest, that was bathe lang and wyde,
> Rycht fra the moss grew to the wattir-syde."[1]

Another large shallow vessel of hammered copper, made entirely of one piece, is in the same collection with the above. It bears considerable resemblance to one discovered at Huckeridge Hill, near Sawston, Cambridgeshire, in 1816, and figured with other "Celtic remains" in the Archæologia, (vol. xviii. *Pl.* XXIV.,) but wants the embossed ornaments which encircle the rim of the latter. It measures fully eighteen inches in diameter by six inches deep, and was found at a depth of eighteen feet below the present level of the Cowgate, Edinburgh. Notwithstanding the difficulty of accounting for so great an accumulation of soil, there is perhaps greater probability in assigning this as part of the *curta supellex* of some wealthy citizen of the Scottish capital, at a period belonging to the latest epoch of the archæologist.[2] But no doubt can be entertained as to the remote era of another such relic already referred to,—the large bronze cauldron dug up about eighteen years since in a bog in King's County, and now in the collection

[1] Blind Harry's Wallace, b. iv. l. 272.

[2] Memorials of Edinburgh, vols. ii. iii.

of the Earl of Rosse. Among the smaller examples of Scottish bronze vessels, one is specially deserving of notice, which was found by a labourer while cutting turf in Lochar Moss, Dumfriesshire, about two miles north from Cumlongan Castle, accompanied by relics of pure native character. It is a small bowl of graceful form, measuring six and a half inches in diameter and three in depth, formed of thin bronze plate of the bright colour common to many of our primitive relics, and very skilfully wrought. Within it lay one of the curious ornamental collars more particularly described in a later page,[1] to which the name of Beaded Torc is now assigned. Lochar Moss, where these interesting antiquities were discovered, has proved a fertile field for archæological treasures of many different eras,—primitive canoes, native stone and bronze relics, products of Roman civilisation and medieval art; while within it lie embedded the trunks of gigantic oaks and other natives of the forest, which once occupied the area of this ancient and extensive morass.

Of the more usual forms of tripods, kettles, and cauldrons of bronze, which are commonly assigned to the Romans, I must speak with more hesitation, though both the circumstances under which these have been found, and the style of some of their decorations, are sufficient to shew that they have been much too summarily classed among foreign productions. So long as bronze continued to be the rare and precious metal which we find good evidence for concluding it to have been during a transition-period of considerable duration, we may be well assured that neither domestic utensils, nor such implements of common use as the older material could supply, would be manufactured of it. We have abundant proof, however, that the supply of the metals kept pace with the increasing demands of progressive civilisation; and as this gradually displaced the old barbarian habits of the Caledonian savage by more refined tastes, the gratification of the palate would be aimed at along with the simpler desire for the mere supply of animal wants. Hence we may trace in the bronze cauldron and the tripod evidences of native civilisation, though doubtless of a late period, and not improbably, in many cases, coeval with the era of Roman invasion. Bronze vessels, of the description to which we refer, have been frequently found not only in the north of Scotland and in Ireland, but in Denmark and Sweden, where no Roman legions ever established a footing; though we must, of

[1] The Bowl and Torc are both engraved on Plate III.

course, bear in remembrance that Roman culinary implements, like Roman coins, might reach many regions which their makers never visited. But classical writers make special reference to the abundance of such vessels among the Gauls, and even ascribe to the Bituriges the invention of the art of tinning them.[1] In the *Samlingar för Nordens Fornälskare*, (*Plate* XXII. vol. ii.,) an ancient Swedish bronze vessel is represented, in no way differing from the common form of what is here invariably designated a Roman camp-kettle, but surrounded with an ornamental belt, decorated with what appear in the engraving somewhat like Runic characters. A still more remarkable medieval example of the bronze kettle is engraved in the Archæologia[2] under the name of an ancient hunting pot. It is of the same common form, but is ornamented in relief with the symbols of the Evangelists, and with various devices, chiefly relating to the chase, and is encircled with the following inscriptions:—Vilelmus Angetel me fecit fieri. And underneath, in smaller characters, this couplet,—

Je sui pot de graunt honour
Viaunde a fere de bon savour.

Many bronze vessels discovered in Scotland have been found on the draining or cutting of mosses, into which they may be supposed to have been thrown on the sudden flight either of the native Briton or the Roman invader, according as we incline to assign them to the one or the other. I am not aware, however, of such having yet been met with, either at any of the great Scoto-Roman coloniæ, such as Inveresk or Cramond, or on the sites of the legionary stations on the wall of Antoninus, though the remarkable discovery of Roman relics at Auchindavy, in 1771, including five altars and a statue, all huddled together in one pit, furnishes no doubtful evidence of the precipitancy with which the legionary cohorts were compelled to abandon the Caledonian wall.[3] An interesting discovery of such bronze vessels was made a few years since in the grounds immediately adjoining the cloisters of Melrose Abbey, and distant only a few miles from the Roman station, near Eildon. Similar objects have in like manner been frequently discovered in Galloway, Nithsdale, and in the district surrounding Birrenswork Hill, the celebrated *Blatum Bulgium*, where, among other curious relics of the Roman invaders, was found the winged figure of the goddess Brigantia, a

[1] Pliny, xxxvi. 22.
[2] Vol. xiv. p. 278, Plates LI., LII., LIII.
[3] Roy's Military Antiquities, p. 201. Plate XXXVIII.

supposed native deity adopted by the complaisant conquerors into the orthodox Pantheon of the Roman world. All these districts, however, abound still more with traces of native occupation, such as the most classical of modern Oldbucks would hesitate to ascribe to a Roman origin. While, however, I feel satisfied that many of these bronze vessels are the products of native art, others are unquestionably Roman, and many more have probably been made after Roman models, so that the attempt to discriminate between them is attended with difficulty. The mere rudeness of workmanship of many of them is not in itself a conclusive argument against their Roman manufacture, since we are hardly justified in looking for all the refinements of classic art in the furniture of the camp kitchen. It may fairly, however, suggest doubts, which receive stronger confirmation when we find it associated with forms peculiar to the northern designer: as in the snake-head with which the spout is frequently terminated. Such is the case with one of the so-called Roman tripods in the Museum of the Scottish Antiquaries, which was found in its present imperfect state at a depth of five feet below the surface, in a moss near Closeburn Hall, Dumfriesshire. It is of a form of very frequent occurrence, and the decoration of the spout, though also not uncommon, is such as an unprejudiced critic would be much more inclined to ascribe to British or Scandinavian than Roman art. It is figured here along with another of rarer form dug up in the neighbourhood of Dundee, and now preserved at Dalmahoy House.[1] The superstitious veneration which ignorance attaches more or less readily to whatever is derived from a remote or unknown origin, has not failed to include these ancient utensils among the objects of its devotion or fear. In Ireland, more especially, this feeling is still powerful in its influence on the peasantry, and not unfrequently throws additional obstacles in the way of anti-

[1] A group of similar bronze vessels of commoner forms, including an example of the Roman sacrificial patera, preserved in the Abbotsford collection, is engraved among the illustrations to the "Antiquary."—*Abbotsford Edit.* vol. ii. p. 12.

quarian research. But in Scotland it was also equally powerful at no very remote date, nor was its influence limited to the unlettered peasant. In the great hall of Tullyallan Castle, near Kincardine, there formerly hung suspended from one of the bosses of its richly sculptured roof an ancient bronze kettle of the most usual form, which bore the name of *The Lady's Purse*. It was traditionally reputed to be filled with gold; and the old family legend bore, that so long as it hung there the Castle would stand and the Tullyallan family would flourish. Whether the Blackadders of Tullyallan ever had recourse to the treasures of the lady's purse in their hour of need can no longer be known, for the castle roof has fallen, and the old race who owned it is extinct. The ancient cauldron, however, on the safety of which the fate of the owners was believed to hang, is preserved. It was dug out of the ruins by a neighbouring tenant, and is still regarded with the veneration due to the fatal memorial of an extinct race. It measures $8\frac{1}{4}$ inches in diameter by $5\frac{1}{8}$ inches in height as it stands, and is simply what would be called by antiquaries a Roman camp-kettle, and by old Scottish dames a brass kail-pot! This medieval tradition suffices at least to show that the object of its superstitious veneration pertained to an older era than that of the Baron's Hall.

A remarkable discovery of a number of bronze vessels of the class alluded to here, was made in the autumn of 1848, by some labourers engaged in trenching a piece of mossy ground, situated under a peculiar ridge of trap rock about a mile and a half due south of North-Berwick Law, on the Balgone estate, the property of Sir George Grant Suttie, Bart. The whole ground, extending to above twenty acres, was formerly a morass. It has been partially drained of late years, in consequence of which the mean level has sunk three to four feet. In the centre of this morass the relics were found, consisting of a large bronze pot or cauldron, several tripods, goblets, and various fragments of thin plates of bronze, all much corroded. One of the bronze goblets lay within the large cauldron, and the whole were found close together, at a depth of about three feet from the surface, apparently just as they had been thrown into the morass, probably not less than seventeen centuries ago.

Another class of works of ancient art and constructive skill, which come under the notice of the archæologist, admit of much more decided and unhesitating assignment to the native manufacturer. These are the specimens of pottery of such frequent occurrence in the

tumuli and cists, and which present, in every respect, so striking a contrast to the fictile manufactures of the Roman colonists. It is not from any doubt of the use of the sepulchral urn, and of the rites of cremation, during the primitive period, that all notice of native fictile ware has been reserved till now, though both furnish undoubted evidence of some progress attained by the primitive Briton. It is altogether impossible, however, with the very limited amount of accurately observed facts with which the Scottish archæologist has to deal, to pretend to classify into distinct periods the pottery found in the ancient tumuli and cairns. Many of these fictilia are so devoid of art as to furnish no other sign of advancement in their constructors from the most primitive state of barbarism, than such as is indicated by the piety which provided a funeral pyre for their dead, and even so rude a vase wherein their ashes might be inurned.

One obvious distinction is at once apparent between the unsymmetrical hand-made urn and that which has been turned and fashioned into regular shape. Yet even this very marked subdivision will not suffice for chronological arrangement; for the very rudest and most unsymmetrical of all the hand-made urns in the Scottish Museum, devoid of grace, and destitute of the very slightest attempt at ornament, was found to cover a pair of gold armillæ somewhat roughly finished with the hammer, and three smaller rings of the same metal, two of which are neatly ornamented with parallel grooves.[1] It seems, indeed, as if some pious hand may have hastily fashioned the clay into shape while the flames of the funeral pile were preparing the ashes it was to hold.

It is obvious even from this single instance, that any assignment of special examples or classes of native fictilia to the primeval period can only be done on the distinct ground of their being found accompanied solely with the relics of flint and stone. Still, setting aside the idea of a precise chronological arrangement, somewhat may be done as an approximation towards a system of classification. The early British pottery, though at best sufficiently rude, exhibits considerable variety both in form and workmanship, from the coarsest specimens of unshapely sun-dried clay to the graceful and elaborately decorated vases evidently made by workmen who had acquired a knowledge of the potter's wheel. Though the whole of these are found with sepulchral deposits, it is rarely difficult to discriminate between domestic

[1] Archæologia Scotica, vol. iv. p. 298, and Plate XII.

vessels and cinerary urns, independently of the contents of the latter. The presence of the cup and bowl alongside the weapons and implements deposited with the ashes of the deceased warrior, is readily accounted for. The difficulty which the uncultivated mind experiences in realizing any adequate conception of death, or of a future state, apart from the daily necessities and cravings of the body, has led in many different stages of social progress to the custom of depositing food and drink, unguents, perfumes, and similar necessaries or luxuries of life beside the body of the loved dead, or even along with the cinerary urn. The archæologist has accordingly been long familiar with the fact, that some at least of the fictile vessels found in the tumuli are not sepulchral, and the names of "drinking cups" or "incense cups" have been given to one class of small vases frequently deposited in cists and barrows.

The first and most obvious subdivision which the early British fictile ware admits of, is into hand-made and wheel-made pottery. Notwithstanding the remarkable example above referred to of the discovery of the former along with gold relics, it is most probable that the hand-made pottery will be generally found to belong to the earliest period. The inverse argument is at any rate indisputable, which assigns the wheel-made pottery to the period of partially developed art and tutored skill. Even in the case of the rude example found in Banffshire, the gold armillæ are roughly wrought with the hammer, and may have been fashioned from the native gold by a workman who knew of its ductility, but had yet to learn the use of the furnace, the crucible, and the mould. We know from the most ancient records both of sacred and profane history, that the potter's wheel is among the earliest inventions of primitive art. It is referred to by the prophets Isaiah and Jeremiah as the most familiar illustration of creative power; and the hieroglyphics and symbolic paintings still visible on the temples of Egypt, prove that the simile is older by many generations than that day when the Hebrew prophet "went down to the potter's house, and behold he wrought a work on the wheels." On the wall of a chamber in the ruined temple of Philæ, which, however, belongs to the era of the Ptolemies, one of the most striking adaptations of the prophetic symbol has been noted. Kneph, the ram-headed god, is represented seated at a potter's wheel, which he turns with his foot, while he fashions the mass of clay on it with his hands. The hieroglyphic inscription which accompanies it is thus

rendered:—"Knum, the Creator, moulds on his wheel the Divine members of Osiris, (the father of men,) in the house of life." It is an old Egyptian version of the simple but sublime language of Isaiah: "O Lord! thou art our Father, we are the clay, and thou our potter." The contents of the earliest Egyptian tombs furnish abundant evidence of the perfection to which the potter's art had been carried; and the recent discoveries at Nimroud and along the banks of the Tigris disclose no less satisfactory proofs of equal skill among the ancient dwellers in the great central plains of Asia, from whence the nomade colonists of Britain have been traced. The ignorance, therefore, of the simple contrivance of the potter's wheel furnishes more conclusive proof of a rude and barbarous state of society even than the stone weapons and implements of the same period. In the one instance we see the intelligent barbarian ingeniously turning to the best account his very limited materials, and effectively supplying the want of metals apparently from the most inadequate resources. In the other we find him fashioning the plastic clay with far less skill or symmetry than the thrush or the common barn-swallow displays in the construction of its nest. It may therefore be assumed as a general rule, that the unsymmetrical hand-made urn belongs to a very early period, and must in most cases be considered the work of an era prior to the introduction of the wheel, or the practice of the decorative arts so abundantly employed in the adornment of later specimens of the same ware.

The rudimentary form of the cinerary urn is the common flower-pot shape, which the potter still finds the easiest and simplest into which the plastic clay can be fashioned. The later fictile ware, however, which is found deposited in the sepulchres, apparently for the purpose of holding food or preserving other tributes of affection or reverence, is characterized by considerable variety both in shape and decoration. Vases of a peculiar form, and apparently not sepulchral but domestic—in so far as they lay beside unburnt bones, and contained no incinerated remains—were discovered in several stone cists dug up in the years 1833 and 1834, in the parish of Whitsome, Berwickshire. The cists measured internally four and a half feet in length, and lay north and south. "Each chest had also its urn of unglazed earthenware, and of a triangular shape, the original contents of which had been converted into a quantity of black dust."[1] I have in vain

[1] New Statist. Acc. vol. ii. Berwickshire, p. 171.

attempted to ascertain if any of these singular examples of primitive fictile ware are still in existence. The two urns here represented were found under circumstances which seem in like manner to indicate their original use as domestic rather than sepulchral vessels,

Urns found at Banchory

though they differ little from shapes of frequent occurrence in cinerary urns. They were found in the year 1817 by a party of men employed in levelling a piece of ground on a farm at Banchory, Aberdeenshire.[1] In the progress of their work their tools struck on a stone, which proved to be the cover of a cist of unusually large dimensions, lying nearly due NE. and SW. It was composed of six stones, so arranged that the skeleton which lay within at full length was bent at the pelvis to fit the angular construction of the cist. It measured internally, in a straight line, six feet, by two and a quarter feet at the north end, where the head lay, and only one foot ten inches at the lower end. The whole was composed of rough undressed mica-slate of from three to five inches thick. Within this the skeleton was disposed in the singular position above described, with the vases on its right side, one opposite the knee and the other at the thigh-joint. Nothing was found in them but some sand which had fallen in on opening the cist. The largest measured six and a half inches, and the other five inches in height. They are described as "composed of the common

[1] MS. Letters and Drawings, Alexander Thomson of Banchory, Esq., 1st Nov. 1817. Libr. Soc. Antiq. Scot. The small cup figured along with them is the one found on Arthur's Seat, near Edinburgh. *Ante*, p. 228.

stones of the country pounded,—granite, mica-slate, apparently some moss-earth, and a little clay on the outside. They are wonderfully accurately made, and the patterns meet so well that one would think they had been done in a lathe or stamped. They are perfectly circular, and seem to have been only baked in the sun." Several cists have been discovered in the same neighbourhood, but no other example is known to have corresponded to this either in disposition or contents. The whole skeleton crumbled into dust after being exposed for a short time to the air; but it would appear to have exhibited the wonted characteristic of a remarkably small head in proportion to the body. The discoverer remarks: "The teeth are perfectly fresh; and from the appearance of the jaws the skeleton must be that of a full-grown person, though of small stature."

A still more remarkable example of pottery somewhat similarly disposed, was discovered more recently on the demolition of the old town steeple of Montrose. This venerable belfry tower, which was ascribed to the twelfth century, occupied the highest ground in the centre of the ancient burgh. After serving for centuries as clock-tower, belfry, and prison, the fabric at length became so ruinous that it was taken down in 1833. In digging the foundations for the new steeple, which occupies its site, the workmen excavated the ground about nine feet below the surface, and fully three feet below the base of the old tower. Remains of several bodies were found in the new ground: one of which lay with the head towards the west, and had a small pile driven through the skull. In another part, directly underneath the foundations of the old tower, was a skeleton disposed at full length in a rude stone cist, and with four urns beside it: two at the head and two at the feet. The skeleton measured six feet in length, and the skull, which has been already referred to, is now in the Edinburgh Phrenological Museum.[1] Only two of the urns were preserved; one of which is now in the Montrose Museum, and the other in the collection of the Scottish Antiquaries. The latter is a neat vessel of common form, and decorated with the usual style of incised chevron ornaments. There is something peculiarly interesting in the recovery of these memorials of long forgotten generations, over which later builders had reared the massive tower unconscious of their presence. The strong old Gothic masonry, after withstanding the storms of some seven centuries, has decayed and

[1] *Ante* p. 170, No. 10 of cranial measurements.

been swept away, and from beneath its foundations we recover the fragile yet more enduring memorials of primitive skill pertaining to a far older era, when the infant nation was just struggling into intelligent youth.

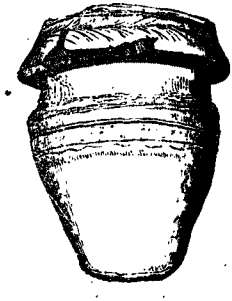
Among the most remarkable classes of domestic pottery found in the tumuli, are those evidently designed for suspension, and occasionally provided with a cover or lid made of the same material. Some of them are made round on the bottom, so as to be unfitted for setting on the ground, and it seems no improbable inference that in these we possess examples of the earliest artificial cooking vessels manufactured by native skill. They are familiar to continental as well as to British archæologists, and are figured in several works on Scandinavian antiquities. The example engraved here, from the original in the Scottish Museum, measures 4½ inches in height, and about 6½ inches in extreme diameter. It was found in one of a group of cists, under a large cairn, situated at a place called Sheal Loch, in the parish of Borthwick, near Edinburgh, and is minutely described by Dr. Jamieson in the Archæologia Scotica.[1] Five perforated projections are disposed at nearly equal distances around it, and the interior of the vessel bears evident marks of fire. Nothing but clay was found either in it or the inclosing cist, and no urns were discovered in any of the adjoining graves. It appears to be made of fine baked clay, and is of a much harder and more durable consistency than the majority of specimens of Celtic pottery. Urns perforated for suspension, though by no means common, are occasionally found in the British tumuli. The fragments of another, found in Fifeshire, with perforated ears, are preserved in the same collection with the above; and a third example, found in a cairn at Crakraig, Sutherlandshire, in 1818, and engraved in the Archæologia,[2] appears to have been of the same class. Reference has already been made to a small cup discovered during the construction of the "Queen's Drive" round Arthur Seat in 1846, and, as is believed, alongside of the cinerary urn, alluded to in a former chapter, which was broken in pieces by the workmen. The little cup is formed with great regularity, and orna-

[1] Vol. ii. p. 76.

[2] Vol. xix. Plate XLIII.

mented with a uniform pattern, the lines of which seem as if they had been impressed on the soft clay with a fine twisted cord. It measures 1¾ inches in height, 3¼ inches in extreme diameter, and fully half an inch in thickness.[1] Another cup, in the Museum of the Scottish Antiquaries, of still more regular proportions, and a higher style of ornamentation, was dug out of the foundation of an ancient ruin in the island of Ronaldshay, Orkney, and presented to the Society in 1831. Like the larger urns referred to above, it is perforated for suspension. Similar cups are of comparatively frequent occurrence; sometimes devoid of ornament, but generally symmetrical, and finished with a degree of art and skill indicative of their construction, and of the adoption of the ideas which led to their being deposited with the funeral urn, at a considerably later period than that of the rude hand-made pottery of the early tumuli.

In striking contrast to these minute sepulchral relics, many of the Scottish cinerary urns are of an unusually large size. So far as my opportunities of observation extend, it is much more common in Scotland than either in England or on the Continent to meet with urns measuring thirteen, fourteen, and even sixteen inches high. In the cairns, more especially where several urns are grouped together, one is very frequently much larger than the others, though not more ornamented; for the pottery of the largest size is generally comparatively plain. The woodcut represents one, now in the Museum of the Scottish Antiquaries, measuring 11½ inches in height. It was found within the area of the modern Scottish capital, in digging for the foundation of the north pier of the Dean Bridge that spans a deep ravine through which the Water of Leith finds its way to the neighbouring port. Numerous cists and urns have been discovered in the extension of the New Town of Edinburgh towards the sea, attesting the presence of a busy and ingenious native race in ages long prior to the dawn of authentic history, on the same spot which has formed the centre of nearly all the most memorable events in the national annals in more recent centuries. Another urn in the Scottish Museum, measuring 12½ inches in height, was found near Abden House, in the parish of Kinghorn, Fifeshire, in 1848, by workmen



[1] It is engraved along with the Banchory urns, *ante* p. 283.

engaged in cutting through the rocks on the sea-shore, preparatory to the formation of the Northern Railway. When discovered it lay in an inverted position on the flat surface of the rock, at a depth of five feet from the surface, and was full of ashes and burnt bones. In examples discovered under similar circumstances, it is not unfrequently observed that the inside of the urn exhibits considerable marks of exposure to heat and smoke. The incinerated remains would appear to have been carefully gathered together in a little heap while yet the glowing embers had only partially consumed the bones, and over this the inverted urn was laid, quenching the last fires that glowed within the ashes once ardent with impetuous life.

None of those examples of primitive Scottish pottery have been accompanied by relics which would enable us to assign them with absolute certainty to the period when the introduction of the metallurgic arts had stimulated native skill and ingenuity into action; unless perhaps in the case of the small cup found on Arthur Seat, alongside of which I have reason to believe the bronze celt now in my possession was found. But most of them, in all probability, do belong to that period; nor is it at all improbable that the practice of cremation may itself be traced to the same source from whence the ingenious workers in stone learned to fuse the metallic ores, and fashion them into every variety of form. There are not wanting, however, numerous examples both of native domestic pottery and of cinerary urns, found along with relics which leave no room to question their belonging to the Bronze Period. The larger of the two vases represented in the annexed woodcut was discovered under a tumulus at Memsie, Aberdeenshire, and beside it lay a bronze leaf-shaped sword, broken in two. It is scarcely a quarter of an inch in thickness, and otherwise exhibits in symmetrical proportions and durable material the evidences of experienced workmanship. In style of ornament it differs little from the ruder specimens of Celtic pottery. But from the well-baked material and the unusual thinness of the ware, it furnishes a good example of the highest perfection attained in the potter's art prior to the introduction of the vitrified glazing which is found

for the first time in connexion with the relics of the latest Pagan era. Some similarity of form may be traced between this vessel and the larger of the two discovered in the cist at Banchory. It is a peculiar shape, and no doubt designed for some special purpose, possibly a pitcher for liquids—the Pictish *heather ale*, perchance, of vulgar tradition,—while the shallower vase which accompanied the former example would more fitly receive the solid food provided to appease the anticipated cravings of the dead. Alongside of the urn from Memsie another is figured belonging to the same period, which was dug up in the parish of Ratho, a few miles from Edinburgh. It was found filled with ashes and fragments of human bones, mingled with which were the fragments of bronze rings, and the handle of a small vessel of the same metal. Both of these specimens of primitive fictile ware are now in the Scottish Museum. A third, in the same collection, somewhat similar to the last, was discovered in trenching a field near the old castle of Kineff, Kincardineshire. A bronze spear lay beside it, and within it were found, mingled with the ashes of the dead, two large bronze rings, possibly designed to be worn as bracelets, and the broken and corroded fragments of several others of smaller proportions.

The numerous discoveries of cinerary urns and sepulchral pottery of various kinds, which have been made in Scotland, abundantly prove the very extensive and long continued practice of the rite of cremation by the early Britons. It is a just subject of regret that so very limited a number of examples of these curious specimens of native art have been preserved. The statistical accounts of nearly every parish in Scotland report such discoveries, frequently in considerable numbers. Many pass into private hands, to be forgotten and abandoned to neglect and decay, when the transient influence of novelty has passed away; many more are destroyed so soon as discovered. To the casual observer they appear mere rude clay urns characterized by little variety or art. A closer examination of them, however, shews that they are divisible by periods, classes, and the adaptation to various purposes; and it is hardly to be doubted that, with an ample and systematically arranged collection, a much more minute classification might become apparent. A more general diffusion of knowledge on this subject will, it is to be hoped, aid in the accomplishment of so desirable an end. With the hearty cooperation of landed proprietors, clergy, and the educated classes who have in-

fluence in rural districts, it might be effected at little cost or trouble; and it is impossible fully to anticipate the important inferences that might become obvious, in relation to the primeval history of our country, by such an accumulation of the productions of native archaic art. Egyptian, Assyrian, Greek, Roman, and medieval manufactures, have all been patiently and enthusiastically traced back to their first rude efforts. It is to the study of the infancy of medieval art especially that the sculptors and painters of Germany, France, and England, have now turned in their enthusiastic anticipations of a new revival. Why should the infantile efforts of our own national ancestry be alone deemed unworthy of regard, rude though they be, and little akin to the favourite models of modern schools? They form an important first-link in the history of native design, and manifestly were among the earliest products of skilled labour and inventive ingenuity. It is obvious, moreover, that the art must have been in use for many generations. Amid the evidences of a thinly scattered population, examples of it are still of very frequent occurrence, after all the ravages of the spade and the plough. In these we trace its gradual improvement, and from thence very effectually discover proofs of the progress of their constructors. First in order is the shapeless hand-made urn, merely dried in the sun. To this succeed the imperfect efforts at decoration and symmetrical design, and also the subjection of the moist clay to the process of the kiln. Then comes the important discovery of the potter's wheel, in the train of which many other improvements follow. Taste is displayed in a variety of forms and ornamental patterns. In the source to which it is conceived some of the more complicated of these designs are referrible, we have another evidence of civilizing arts. Among the rarer contents of the British sepulchral mounds, fragments of manufactured clothing have been repeatedly found. These appear to have been invariably wrought with the knitting-needle, and in their texture may be traced the various patterns of herring-bone, chevron, and saltire work, as well as nearly all the more complicated designs employed in ornamenting the contemporary pottery. After a careful examination of the examples within my reach, I have little doubt of this being the source of the earliest imitative ornamentation, in advance of the first simple attempts at combinations of incised lines. The subject will come again under review in a future chapter; but, meanwhile, it may be noted here as suggestive of the possible first source of decoration of the rude cinerary urn, that its fragile texture

may have been strengthened by being surrounded with a platting of cords or rushes, which, in tasteful hands, would assume the same forms as in the work of the knitting needles, and thus lead to the reproduction of such patterns by a more durable process on the clay. Humboldt describes a similar practice which came under his notice at the village of Maniquarez in South America, where the Indian women fashioned their rude vessels out of a decomposed mica-slate, which they bound together with twigs, and baked in the sun. It is certain that very many of the indented patterns on British pottery have been produced by the impress of twisted cords on the wet clay, —the intentional imitation, it may be, of undesigned indentations originally made by the platted net-work on ruder urns,—so simple and yet so natural may be the source to which we must look for the first glimmering dawn of British art. Painters have delighted to picture the Grecian maiden tracing her lover's shadow on the wall. Perchance some British artist may not think it beneath his pencil to restore to us the aboriginal potter marvelling at the unsought beauty which his own hands have wrought.

Along with such evidences of taste and inventive ingenuity as the works of the primitive potter display, the increasing demands of progressive civilisation also become apparent in the adaptation of vessels to the various requirements of domestic convenience or luxury; the clay-made pottery improves from the clumsy, friable, ill-baked urn, into a vessel of light and durable consistency, fitted for all the common purposes of fictile ware. To this extent it was carried during the archaic era of native art to which we give the name of the Bronze Period. It will be seen in a future section that it received further improvements from native skill before it was superseded by more ingenious arts indirectly derived from Roman civilisation.

CHAPTER VI.

PERSONAL ORNAMENTS.

In nothing is the singular inequality so characteristic of archaic art more strikingly apparent than in the contrast frequently observable between the rude clay urn of the Scottish tumulus or cairn and the valuable and beautiful relics which it contains. Many of the latter, indeed, are scarcely admissible under any classification of archaic art. They differ more in characteristic peculiarities of style than in inferiority of design when compared with the relics of the Anglo-Roman period. Reference has already been made to the probable sources from whence the abundant supplies of gold were derived by the primitive Caledonian metallurgist. But whencesoever they are assumed to have been procured, the fact is unquestionable, that while silver was exceedingly rare, if not, indeed, entirely unknown, until almost the close of the Bronze Period, gold appears to have been one of the very first metals wrought, and to have been obtained in such abundance as to supply material for numerous personal ornaments of large size and great weight.

But the skill and ingenuity of the primitive artist was not solely confined to ornaments wrought in gold or bronze. The humblest materials assumed new value by the aid of his ingenuity and taste; and not a few of the personal ornaments of a comparatively late stage of progression in the Bronze Period are still formed of stone, or of the more easily wrought jet and bituminous shale. Beads and necklaces of the latter materials are of very frequent occurrence, and while some are characterized by little evidence of taste or ingenuity, many more are the manifest products of experienced mechanical skill. In these

especially we detect the evidence of the use of the turning-lathe, and its ingenious adaptation to the production of a great variety of articles. This we may fairly regard as another important step in advance of the improvements already detected in the native fictile wares by the introduction of the potter's wheel. Some antiquaries, indeed, have been inclined to class those, as well as so many other evidences of native skill, either among the direct products of Roman art, or as the fruits of the civilizing influence resulting from intercourse with the Roman colonists; but if previous evidences of the priority of the early native eras are of the slightest value, the circumstances under which many jet and shale ornaments and relics have been found leave no room to doubt that they are the products of unaided native ingenuity and mechanical skill. These materials, however, continued to be used during the Anglo-Roman period, and to partake of the influences of Italian art in the forms which they assumed. It therefore becomes necessary to exercise the same care in discriminating between the products of native and foreign taste in the relics of jet or shale, as in those of the metals, or of glass and ivory. According to Solinus jet was one of the articles of export from Britain; and Bede speaks of British jet as abundant and highly valued.[1] But from these evidences of its later foreign use we may infer its early adoption for construction of personal ornaments by the native Britons, among whom its fitness for such purposes was very probably first recognised. The style of many of the relics of this class found in the primitive cists and cairns, and especially of those which are presumed to be female ornaments, totally differs from Anglo-Roman or classic remains, and abundantly confirms their native origin, already rendered so exceedingly probable from their discovery in early sepulchral mounds. An interesting discovery of such relics, made in the parish of Houstoun, Renfrewshire, during the latter part of last century, is thus described in the Old Statistical Account:

"When the country people were digging for stones to inclose their farms, they met with several chests or coffins of flag-stones, set on their edges, sides, and ends, and covered with the same sort of stones above, in which were many human bones of a large size, and several skulls in some of them. In one was found many trinkets of a jet black substance, some round, others round and oblong, and others of a diamond shape, &c., all perforated. Probably they were a necklace. There was a thin piece, about two inches broad at one end, and perforated with many holes,

[1] Solinus, c. xxii. Bede Hist. lib. i. c. 1. Collectanea Antiqua, C. R. Smith, vol. i. p. 174.

but narrow at the other; the broad end, full of holes, seemed to be designed for suspending many trinkets as an ornament on the breast."[1]

In 1841 a stone cist was discovered on the estate of Burgie, in the parish of Rafford, Elginshire, which measured internally three feet in length by two feet in breadth. It contained a skeleton, believed to be that of a female from the small size of the bones, in a sitting posture, and with the head in contact with the knees. Beside the skeleton stood an urn ten inches high, rudely decorated with incised lines; and alongside of it were found a ring of polished shale or cannel coal, two and a half inches in diameter; four rhomboidal pieces of the same material, the largest pair two inches long; two triangular pieces, and about an hundred large beads, all perforated for the purpose of being strung together for a necklace. Various other cists have been discovered on the same estate, generally containing urns; but this is believed to have been the only example of the ring and necklace of polished shale.

A necklace formed in part of similar ornaments is now in the interesting collection of Adam Arbuthnot, Esq., of Peterhead. It was found a few years since in a tumulus in the parish of Cruden, Aberdeenshire, and consists of alternate beads of jet and perforated but irregular pieces of amber. The largest beads measure about four inches in length, from which they diminish to about an inch. The only other object beside them was a flint hatchet about seven inches long; so that this curious example of primitive personal ornaments may be assumed to belong to the earliest period, or perhaps to that of the transition from stone to metallic weapons and implements.

On opening a cairn on the hill of Auchmacher, Aberdeenshire, about 1790, an urn was exposed, in the mouth of which lay a number of circular perforated beads of black shale.[2] About the same period another urn was dug up in the parish of Ceres, Fifeshire, within which a smaller one was inclosed, and in it, in addition to the incinerated remains, lay a small brass implement, probably a hair-pin, (described as resembling a shoemaker's awl,) and a small black bead cut in diamond form.[3]

Various interesting personal ornaments obtained under similar circumstances, are preserved in the Museum of the Scottish Antiquaries, and one set in particular, found inclosed in an urn within a rude stone cist, on the demolition of a tumulus near the Old

[1] Sinclair's Stat. Acc. vol. i. p. 330. [2] Ibid. vol. xvi. p. 482. [3] Ibid. vol. v. p. 392.

House of Assynt, Ross-shire, in 1824, very closely correspond in appearance to the description of the Renfrewshire relics. They include a necklace of irregular oval jet beads, which appear to have been

Jet Necklace, Ross-shire.

strung together like a common modern string of beads, and are sufficiently rude to correspond with the works of a very primitive era. The other ornaments which are represented here, about one-fourth the size of the original, are curiously studded with gold spots, arranged in patterns similar to those with which the rude pottery of the British tumuli are most frequently decorated, and the whole are perforated with holes, passing obliquely from the back through the edge, evidently designed for attaching them to each other by means of threads.[1] Several other urns were discovered in a large cairn, a few miles distant from the tumulus which contained these interesting and tasteful relics of female adornment, as they are with great probability assumed to be; though it is well known that the modes of personal decoration which modern taste and refinement reserve for the fair sex are very differently apportioned in ruder states of society. The comparative anatomist can alone absolutely determine this question by future observations on the bones discovered along with similar remains. Meanwhile these examples are of peculiar value from the conclusion previously assumed by Sir Richard Colt Hoare, after examination of various sepulchral deposits containing similar relics, that the female barrow very rarely contains urns. Another sepulchral deposit of similar personal ornaments, including two fibulæ or discs of bituminous shale measuring one and a half inches in diameter, found in a grave at Letham, was presented to the Scottish Museum in 1820 by Sir David

[1] Archæol. Scot. vol. iii. p. 49.

Brewster. It probably formed a portion of the contents of a group of cists discovered in a round gravel knoll or tumulus, near the Den of Letham, and described in the New Statistical Account of Dunnichen Parish, Forfarshire. They contained urns of red clay with rude ornaments upon them, and human bones irregularly disposed. "The neck-bones of some were adorned with strings of beads of a beautiful glossy black colour, neatly perforated longitudinally, and strung together by the fibres of animals. They were of an oval figure; large and small ones were arranged alternately, the large ones flat on the two opposite surfaces, the small ones round. They seemed to consist of ebony, or of some fine-grained wood which had been charred and then finely polished. On keeping them some time they split into plates, and the woody fibres separated. In some of these graves rusty daggers were found, which fell in pieces by handling."[1] One is almost tempted to challenge the completeness of this account, and to suspect the position of the necklaces, and perhaps the fibre-strings also, to be creations of the statist's imagination, more especially as the graves contained no perfect skeleton, but only loose bones. The woodcut represents a fibula of the same material, in the possession of James Drummond, Esq. It is drawn one-half the size of the original, which was recently found in a moss at Crawford Moor, near Carstairs, Lanarkshire. Simple as its form is it is not unfamiliar to the British antiquary. Sir R. C. Hoare describes and figures one exactly similar, found on opening a bell-shaped barrow at Blandford, and examples are referred to in the Ancient Wiltshire and other works.[2] Whether we regard this uniformity of type as evidence of the extent of intercourse anciently carried on among the most widely severed tribes, or of some system by which such relics were diffused by the wandering trader throughout the whole British islands, such comparisons cannot fail to interest the student of primitive history, trifling though they may appear, and to stimulate him to further investigation of such analogies.

English antiquaries have long been familiar with relics of this

[1] New Stat. Acc. vol. xi. p. 147.

[2] Ancient Wiltshire, Plates XII. and XXXIV.

class, under the local name of ornaments of Kimmeridge Coal, and also with a more mysterious variety formed of the same material, on which the name of "Kimmeridge Coal Money" was conferred, from the idea that these symmetrical pieces of shale were used as a circulating medium before the introduction of the metals. The material of which the whole of this class of relics are composed has obviously been applied to the manufacture of personal ornaments from a very remote era, though the so-called coal money probably belongs to a comparatively late period. Some interesting examples of necklaces and other ornaments, precisely similar in style and character to those found in the Renfrew, Ross, and Fifeshire tumuli, were discovered on opening some Derbyshire barrows in 1846. These "female decorations of Kimmeridge coal," as they are styled in the account of the discovery in the Journal of the Archæological Association,[1] were deposited beside a female skeleton, in a cist formed of large stones. "The other instruments found on this occasion were all of flint, not the least fragment of metallic substance being visible. The ornament appears to have been a kind of necklace, with a central decoration, enriched by bone or ivory plates, ornamented with the chevron pattern so prevalent on articles of presumed Celtic manufacture, terminating with two laterally perforated studs of the coal; the remainder of the ornament consists of two rows of bugle-shaped beads of the same material." A few days later, two more necklaces, of similar design and material, were found in a cist under a barrow in the same county, in like manner accompanied only with implements of flint and bone. Engravings of some of these relics accompany the narrative of their discovery; and their remarkable similarity to those of the early Scottish tumuli, leaves no doubt that both belong to the same period. It is remarked of the Derbyshire relics by their discoverer,—"On the most superficial examination, it is quite evident that these articles have never received their form from the lathe, as the armlets of Kimmeridge coal are clearly proved to have done. This, coupled with the fact that the perforation through the length of the bead is in no instance carried through from one end, but is bored each way towards the centre, (as would be the case if a rude drill of flint were used for the purpose,) bespeaks a far more remote period than the one in which the use of the lathe was prevalent."[2] Both the unsymmetrical form, and the perforation of the

[1] Journal of Archæol. Assoc. vol. ii. p. 234. [2] Vol. ii. p. 235.

beads found in the Ross-shire tumulus, fully correspond with these in the indications of the imperfect skill and rude instruments of their manufacturers. But the slow progress of native art was first aided, as we have seen, by the introduction of the potter's wheel; and from this, in all probability, originated the more ingenious contrivance of the turning-lathe. Whencesoever derived, its influence is abundantly apparent on the later relics of native art.

The "coal money" of the elder school of English antiquaries is found almost exclusively in two little secluded valleys at Purbeck, on the southern coast of Dorsetshire, known as Kimmeridge and Worthbarrow Bays. Similar relics, however, it will be seen, are not unknown in Scotland, though designated by other names than the local term derived from Kimmeridge Bay. They consist of flat circular pieces of shale, with bevelled and moulded edges, varying in size from 1¼ to nearly 3 inches in diameter, and frequently perforated or indented with one or more holes. The actual purpose for which this coinage of the Kimmeridge Mint was destined, long formed an antiquarian riddle, which baffled the acutest English archæologists; for the popular name was rather adopted as a convenient term, than seriously regarded as properly applicable to articles so fragile and valueless. One ingenious but somewhat fanciful theorist did, indeed, attempt to prove these relics to be the work of Phœnician artists, designed, not as an actual circulating medium, "but as representatives of coin, and of some mystical use in sacrificial or sepulchral rites!" All such ideas, however, are now entirely exploded, and it is no longer doubted that these are the waste pieces produced in the formation of rings from the shale on the turning-lathe. The fragments of pottery, and other relics discovered along with these curious exuviæ of early art, leave little room to doubt that during the Anglo-Roman period a manufacture of amulets, beads, and other personal ornaments of Kimmeridge shale, must have been carried on to a considerable extent in the Isle of Purbeck.[1]

The popular idea of the use of such circular pieces of shale as money is found attached to them in Scotland as well as in England. In the account of the parish of Portpatrick, it is remarked,—"Circular pieces, from two to three inches diameter, cut out of a black slate

[1] *Vide* John Sydenham "On the Kimmeridge Coal Money," Archæological Journal, vol. i. p. 347; and Journal of the Archæological Association, vol. i. p. 325, where accurate engravings of the "coal money" are given.

not found in the parish, are frequently dug up in the churchyard, along with rings out of which these pieces seem to have been cut. Both of these are supposed by the people here to have been used as money."[1]

Similar relics have been found in Kirkcudbright and other southern shires; and Mr. Joseph Train describes others, not greatly differing in character, found near the large moat or tumulus on the farm of Hallferne, parish of Crossmichael, where also a beautiful Druidical bead was discovered, nearly an inch in diameter, composed of pale-coloured glass, with a waving stripe of yellow round the circumference. In Kirkcudbrightshire, these ornaments of shale have retained nearly to our own day the same rank in popular estimation for their medicinal virtues, or supernatural powers, as we find ascribed to the ornaments and amulets of jet among the Romans.[2] Mr. Train remarks,—

"There have been found, at different times, near the same moat, several round flat stones, each five or six inches diameter, perforated artificially in the centre. Even within the memory of some persons yet alive, these perforated stones were used in Galloway to counteract the supposed effects of witchcraft, particularly in horses and black cattle. 'The cannie wife o' Glengappoch put a boirt stane into ane tub filled with water, and causit syne the haill cattell to pass by, and, when passing, springled ilk ane o' them with a besome dipped in it.' One of these perforated stones, as black and glossy as polished ebony, is also in my possession. It was recently found in the ruins of an old byre, where it had evidently been placed for the protection of the cattle."[3]

Ure remarks in his History of Kilbride, "a ring of a hard black schistus, found in a cairn in the parish of Inchinan, has performed, if we believe report, many astonishing cures. It is to this day preserved in the parish as an inestimable specific."[4] Similar proofs of the superstitious reverence attached to these ancient relics are by no means rare.

From evidence already referred to, it is abundantly obvious that ornaments both of shale and jet were in use at the period of the Roman colonization of Britain, and this is further confirmed by their discovery along with Anglo-Roman sepulchral remains. Most of those, however, exhibit a degree of finish and ornamentation which dis-

[1] New Statistical Account, vol. iv., Wigtonshire, p. 142.

[2] "Fugat serpentes ita, recreatque vulvæ strangulationes. Deprehendit sonticum morbum, et virginitatem suffitus. Hoc dicuntur uti Magi in ea, quam vocant axinomantiam: et peruri negant, si eventurum sit, quod aliquis optet."—*Pliny*, lib. xxxvi. cap. 34.

[3] Communication by Mr. Joseph Train to the New Statist. Acc. vol. iv., Kirkcudbrightshire, p. 196.

[4] Ure's Hist. of Rutherglen and Kilbride, p. 219.

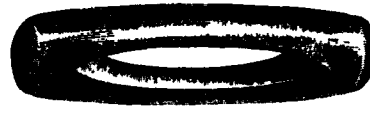
tinguishes them from works in the same materials of an older date. Still it is the more needful to examine with care the circumstances under which the latter have been found, and to ascertain, if possible, whether they are contemporary works of ruder execution, or really pertain to an earlier era. Relics of this class, it is obvious, are by no means uncommon; and it is with a view to the discrimination of those of native origin from the later products of foreign art, that so many examples are here referred to.

Sir Robert Sibbald thus notices the occurrence of rings or armlets of shale in Scottish sepulchral mounds:—"Some full circles, of a black colour, very smooth, two or three inches in diameter, are found in the kairns or burroughs. They are very light, and when fire is put to them they burn and give a good smell, and seem to be made of odoriferous gums."[1] Mr. Ure appears to have tried the same costly experiment, and remarks as its result, that they burn with a clear flame. There formerly existed in the district of Logie, Forfarshire, a remarkable group of tumuli, called the Three Laws of Logie; which agricultural operations have since nearly obliterated. On opening one of these, it proved to contain four human skeletons, near to which was one of the above relics, described "as a beautiful ring, supposed to be of ebony, as black as jet, of a fine polish, and in perfect preservation. It is of a circular form, flat in the inside, and rounded without. Its circumference is about twelve inches, and its diameter four inches."[2] A large cairn, in the parish of East Kilbride, bore the name of Queen Mary's Mount, from the tradition that the unhappy Queen witnessed from its summit the Battle of Langside, and beheld the sceptre of a kingdom pass for ever from her grasp. But such touching historical associations could not suffice to rescue the venerable memorial from the hands of the destroyer. For years it supplied the whole neighbouring districts with materials for building stone fences, until some workmen employed in removing the remaining stones, in 1792, discovered a chamber containing about twenty-five urns full of earth and human bones. These urns, some of which have been engraved in Ure's History, were of the most primitive shape and character, "rudely formed, seemingly with no other instrument than the hand, and so soft as easily to be scratched with the nail. They were of different sizes, mostly about twelve inches deep,

[1] Portes, Coloniæ, &c. Append. 18, and Plate III.

[2] Sinclair's Statistical Account, vol. ix. p. 53.

and six wide at the mouth. None of them were destitute of ornaments; but these were extremely rude, and seem to have been done in a hurry, with a sharp-pointed instrument. They were all placed with their mouths undermost upon flat stones; and a piece of white quartz was found in the centre of the mouth of each, larger and smaller, in proportion to the dimensions of the several urns."[1] A cist of about four feet square was placed exactly in the centre of the cairn, near to which was a bronze fibula of extremely rude form; another, still simpler in design, was found in one of the urns, and a bronze comb, equally characteristic of primitive arts, in a second; while alongside of them lay one of the rings of bituminous shale. The bronze relics are all engraved by Ure, so that a tolerably perfect idea can be formed of their design and workmanship. He pronounces them, according to the fashion of his time, to be Roman, but they bear no resemblance to the rudest specimens of Anglo-Roman art. Similar ornaments of shale have been discovered both in the Northern and Western Isles, furthest removed from Roman arts and influence. One example, which is here engraved one half the natural size, was found in the Isle of Skye, and presented to the Scottish Society of Antiquaries in 1782. It is supposed to be designed for the clasp of a belt. Two rings of the same material, each measuring 3½ inches in diameter, were discovered about two years later on the same island, and added to the Scottish Museum. Another, four inches in diameter, flat on the inside, and rounded without, as is most frequently the case, was obtained from a tumulus in the parish of Logie, Forfarshire, along with an urn full of ashes, and the remains of four skeletons.[2] In 1832, some labourers levelling a sandy field at Dubbs, in the parish of Stevenston, Ayrshire, came upon a paved area five feet under the surface, measuring six yards long and two broad. Across the one end lay a stone of about a ton weight, and at the other there was found a stone cist, measuring three feet in length by two in breadth. Within it were two urns, one of gray and the other of black pottery, both apparently filled only with earth, and beside them lay five studs or buttons of different sizes, formed of highly



[1] Ure's Rutherglen and Kilbride, p. 217, and Plate I.

[2] Sinclair's Statistical Account, vol. ix. p. 52.

polished jet. The urns were broken, but the studs were preserved by the late Colonel Hamilton. They are convex on the one side, and concave on the other, with knobs left in the latter, seemingly for attaching them to the dress. The largest is more than an inch in diameter.[1] Two other rings of polished shale, similar to those already described, were discovered in 1786, lying beside a skeleton, on removing a large flat stone within the area of one of those circular towers in Caithness, commonly termed burghs, or Pictish Forts. Beside them lay a bone pin, and two fine oval brooches, (the *Skaal-formet Spande* of Danish antiquaries,) such as have been frequently discovered in the Northern and Western Isles, and are now generally ascribed to the era of the Vikings.

Such examples, it is obvious, might be greatly multiplied, but enough have been cited to enable us to trace the use of those ornaments from probably the earliest years of the Bronze Period to the close of the latest Pagan era. The rings, which form the most common articles manufactured of shale, have been usually considered as armlets, but it is very doubtful if such was their real use. Many of them, indeed, are too small to admit of the hand passing through them, and rings of similar size and form are discovered of various other materials. One in the Scottish Museum, apparently of glazed earthenware, and measuring nearly three inches in diameter, was found under a large cairn at Bogheads, Kintore parish, Aberdeenshire, in 1789, and beside it lay four oblong squared pieces of polished shale, the two largest two inches in length, the other two an inch and a half, and an inch broad. Between each pair were three oval beads of the same substance, nearly an inch long. They were described, when presented to the Society, as having been suspended from the ring; but it is more probable that they formed, as in other cases, a separate necklace. A number of cairns, some of them of very large dimensions, still remain on the extensive moor which occupies a considerable area in both the parishes of Kinellar and Kintore. Another ring in the same collection, formed of a white translucent stone, was found on the Flanders Moss, Perthshire; and a third made of hard dark wood, $3\frac{1}{2}$ inches in diameter, and $1\frac{3}{4}$ inches broad, was discovered near a cairn on the north side of Hatlock, in Tweeddale, on first subjecting the neighbouring heath to the plough in 1784. It has been suggested that these rings formed part of the female head gear, through which the hair was

[1] New Statist. Acc. vol. v. p. 454.

drawn; and a sculptured female head, found at Bath, is referred to, on which an ornament somewhat resembling them is represented so applied.[1] The discovery of such rings alongside of female ornaments, such as the necklaces and pendants already described, seems to justify the classification of them among objects of mere personal adornment; and where found singly, their supposed use in the arrangement of the long locks of their owners furnishes a very feasible explanation of the purpose for which they were designed. Nevertheless, the frequency of their occurrence, under a great variety of circumstances, suggests the idea that these rings may possess a higher value as the records of long obsolete rites and customs, than pertains to the mere objects of personal adornment. They have been found accompanying female ornaments, and apparently with female remains; but they have also been discovered no less certainly in the sepulchres of warriors and chiefs, and under cairns which seem to mark the last resting-place of those who fell in the grim strife of war. We shall not perhaps greatly err, if we trace in these relics of such frequent occurrence something analogous to the sacramental ring of the Scandinavians, described in the Eyrbiggia-Saga, and referred to in a former chapter in illustration of the perforated stone at Stennis, in Orkney, and the vow of Odin of which it was the seal. Dr. Hibbert has already observed on this subject,—

"In Iceland a less bulky ring for the ratification of engagements was introduced. Within the hof was a division, like a choir in a church, where stood an elevation in the middle of the floor, and an altar. Upon the altar was placed a ring, without any joint, of the value of two oras. These rings (idly named Druidical amulets) are variously formed of bone, of jet, of stone, and even of the precious metals. Some are so wide as to allow the palm of the hand to be passed through them, which rings were used when parties entered into mutual compacts. In a woodcut given in an old edition of Olaus Magnus, the solemnization of a betrothing contract is represented by the bridegroom passing his four fingers and palm through a large ring, and in this manner receiving the hand of the bride. This is similar to the mode practised in Orkney, where contracting parties join hands through the perforation, or more properly speaking the ring, of a stone pillar. In the oath administered to an individual as a test of veracity, it was sufficient that he held in his hand a ring of small size, dipped in the blood of sacrificial victims."[2]

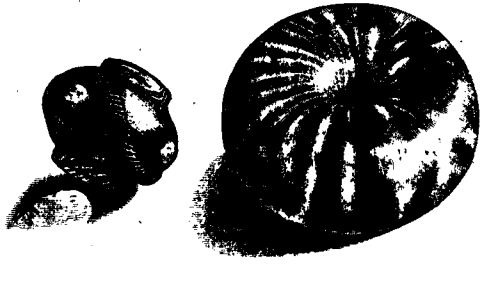
An illustration of the mode of administering such an oath occurs in Viga Glum's Saga. In the midst of a wedding party Glum calls upon

[1] Collectanea Antiqua, C. R. Smith, vol. i. p. 174.

[2] On the Tings of Orkney and Shetland. Archæol. Scotica, vol. iii. p. 120.

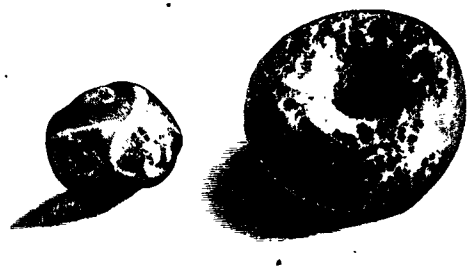
Thorarin, his accuser, to hear his oath, and taking in his hand a silver ring, which had been dipped in sacrificial blood, he cites two witnesses to testify to his oath on the ring, and his having appealed to the gods in his denial of the charge. These customs belong to a more recent era than that to which we refer the Scottish Bronze Period. But it is impossible to say to how remote an era we must look for their origin, or how long before the time of the Vikings, the Scandinavian and Celtic races, as well as their Allophylian precursors, had been familiar in their common cradle-land in the far east, with rites and usages from which the sacredness of this sacramental ring may have sprung.

Viewed in this light the frequent occurrence of such relics in the cist, or under the memorial cairn, may be pregnant with a far higher meaning than the mere ornamental fibula or amulet. When found with the spear and sword, the ring may indicate the grave of the warrior-priest or lawgiver,—a union of offices so consistent with society in a primitive state; while, in the female barrow, amid the bracelets and necklaces which once adorned the primitive British matron, the curious relic may, with no undue indulgence of fancy, be looked upon as the spousal pledge, and the literal wedding-ring. It seems, indeed, most probable, that the little golden ring with which, in these modern centuries, we wed, is none other than the symbolic memorial of the old sacramental ring which witnessed the vows of our rude island fathers, and was made the pledge of their plighted troth. This, however, is perhaps trespassing beyond the pale of legitimate induction into the seductive regions of fancy, where antiquaries have too frequently chosen to wander at their own sweet will.



In some degree akin to the personal ornaments of jet and shale are the large beads of glass or vitreous paste, and amber, so well known among the contents of British tumuli, and associated even in our own day, with the same superstitious virtues ascribed to them in the writings of the philosophic but credulous Pliny. The very same story, in fact, is told of the *Adder-stane* in the popular legends of the Scottish Lowlands as Pliny

records of the origin of the *Ovum Anguinum*. The various names by which these relics are designated all point to their estimation as amulets or superstitious charms, and the fact of their occurrence, most frequently singly, in the sepulchral cist or urn, seems to prove that it was as such, and not merely as personal ornaments, that they were deposited along with the ashes of the dead. They are variously known as Adder Beads, Serpent Stones, Druidical Beads, and among the Welsh and Irish by the synonymous terms of *Gleini na Droedh*, and *Glaine nan Druidhe*, signifying the Magician's or Druid's glass. Many of them are exceedingly beautiful, and are characterized by considerable ingenuity in the variations of style. Among those in the Museum of the Scottish Antiquaries there is one of red glass, spotted with white; another of dark brown glass, streaked with yellow; others of pale green and blue glass, plain and ribbed; and two of curiously figured patterns, wrought with various colours interwoven on their surface. The specimens engraved here are selected from these. Among a curious collection of antiquities discovered in a barrow on Barnham Downs, and exhibited by Lord Landesborough at a meeting of the Society of Antiquaries of London, March 7, 1850, there was a large glass bead, which had been broken and ingeniously repaired with a hoop of bronze,—a significant indication of the great value attached to it.



Beads of amber, stone, clay, and porcelain, as well as of horn and bone, are all more or less common among the early sepulchral deposits, and may be regarded with little hesitation as of native workmanship. Amber, though not indigenous to this country, is of sufficiently frequent occurrence to abundantly account for its use in the manufacture of personal ornaments, without assuming its importation from the Baltic, where it most largely abounds. Both Boece[1] and Camden notice the finding of pieces of extraordinary

[1] Boece gives the following quaint description of amber, affording evidence of the mode of its introduction, though sufficiently extravagant in the style of its theorizing:—"Amang the rochis and craggis of thir ilis growis ane maner of electuar and goum, hewit like gold, and sa attractive of nature, that it drawis stra, flox, or hemmis of claithis to it, in the samin maner as dois ane adamont stane. This goume is generat

size at Buchanness, on the coast of Aberdeenshire. The clergyman of the parish of Peterhead, in the same county, in drawing up an account of his parish for Sir John Sinclair, mentions having in his possession "a pretty large piece of amber," recently found on the sea-beach near the manse; and in 1783, Mr. George Paton presented to the Society of Antiquaries of Scotland two pieces found on the sea-shore in the Frith of Forth, near Queensferry. The fact, indeed, of amber being obtained in the greatest quantities on the southern coasts of the Baltic Sea, is abundantly sufficient to account for its also frequently occurring in smaller quantities on the east coast of Scotland. It appears accordingly to have formed one of the most favourite articles for adorning and setting brooches, hair-pins, and other personal ornaments, from the earliest practice of the jeweller's art, until our native tastes and customs were merged, by increasing intercourse with other nations, into the common characteristics of later medieval art.

The source from whence the "Adder Beads" were derived is more difficult of solution. The most probable means of accounting for their introduction to Britain is by the Phœnicians, or by traders in direct communication with that people, whose early skill in the manufacture of glass is familiar to us, and to whom we in all probability owe the initiative suggestions and examples which originated the most important improvements characteristic of the period now under consideration. Still it must be borne in remembrance, that after all we know extremely little, and almost nothing precise or definite, concerning Phœnician intercourse with Britain. Druids, Picts, and Danes have all been very convenient names which have too often saved Scottish antiquaries, and indeed English antiquaries also, the trouble of reasoning, and helped to conceal the fact, from themselves as well as others, that they really knew nothing about the questions

of see froith, quhilk is cassin up be continewal repercussion of craggis againis the see wallis; and throw ithand motioun of the see it growis als teuch as glew, ay mair and mair; quhill, at last, it fallis doun of the crag in the see. . . . Twa yeir afore the cumin of this buke to licht, arrivit ane gret lomp of this goum in Buchquhane, als mekle as ane hors; and wes brocht hame be the hirdis quhilkis wer kepand thair beistis, to thair housis, and cassin in the fire. And becaus thay fand ane smelland odour thairwith, thay schew to thair maister that it wes ganand for the sens that is made in the kirkis. Thair maister wes ane rud man as thay wer, and tuke bot ane litill part thairof. The maist pairt wes destroyit afore it come to ony wise mannis eris; of quhome may be verifyit the proverb,—'The sow curis na balme.' Als sone as I wes advertist thairof, I maid sic diligence, that ane part of it wes brocht to me at Abirdene." Bellenden's Boece. The Cosmographie, chap. xv.

they undertook to discuss. If we merely substitute for these the name of the Phœnicians little indeed will be gained by the exchange.

Sir William Hamilton has undertaken to prove the Italian workmanship of the glass beads found in Britain, on the very slender evidence of the discovery of one at Naples similar to British examples. They have undoubtedly been found both in England and Scotland accompanied with Roman relics, though much more frequently in native sepulchres apparently long prior to the Anglo-Roman era. Ure describes and engraves one of ribbed blue glass—bearing considerable resemblance to another in the Scottish Museum from the Isle of Skye—which was discovered in a large inclosed tumulus in Rutherglen parish, Lanarkshire, along with what appear to have been two Roman patellæ.[1] But the same relics have been found along the coasts of the Baltic and the Mediterranean; they abound equally in Ireland and the north of Scotland, where the Romans rarely or never were, and in England and Gaul, which they so long occupied and colonized. They have been obtained also not unfrequently in Egyptian catacombs accompanying relics long prior to the Roman era. Raspe, in his introduction to Tassie's Gems, refers to the so-called Druid's beads as belonging to the same class as the "rich coloured glass and enamels found amongst the Egyptian antiquities;" and Colonel Howard Vyse mentions them among the numerous relics found in exploring "Campbell's Tomb" at Gizeh, which appears to have been constructed during the reign of Psammetichus II., about B.C. 600. But indeed the most conclusive and altogether incontrovertible evidence of the remote antiquity to which these singular and widely-diffused relics belong, is to be found in the fact, that their origin and virtues were the subjects of the same superstitious fables in the age of Pliny, as in the British folk-lore of the eighteenth century. We shall not, I think, overstep the limits of fair induction in viewing these beads as affording another proof of the extensive, though probably indirect intercourse, by means of which the races of the north of Europe participated in the reflex of southern civilisation many centuries before we can trace any allusion to them in the world's elder literature; unless where the fond Briton seeks to include his sea-girt home amid "the isles of the Gentiles" of the Hebrew Scriptures, or dimly discerns them in the Cassiterides of Herodotus. It should be noted, in connexion with this subject, that

[1] Ure's Rutherglen, p. 164, Plate I.

other glass relics have occasionally been found among the contents of British tumuli, though much too rarely to afford any countenance to the idea of a primitive native manufacture of glass. One imperfect example in the Museum of the Scottish Antiquaries, found in a cist in the island of Westray, Orkney, apparently deposited on the breast of the deceased, is described by its donor as "the only specimen hitherto discovered of glass contained in these cemeteries." It appears to have been a cup, not improbably of Roman manufacture, the bottom of which is marked with concentric circles in relief. The extreme rarity of such articles probably characterizes this as another example of the ungrudging generosity of affectionate reverence for the deceased, no less marked than the more valued sepulchral deposits of the precious metals.

Of the beautiful gold and silver relics exposed from time to time on the opening of Scottish sepulchral tumuli, or brought to light in the course of agricultural operations, only the most trifling moiety has escaped the clutches of ignorant cupidity. But even the few existing specimens are sufficient to excite the deepest sorrow that such works of early native art, frequently characterized by a style altogether unique, and exceedingly beautiful in design and ornament, should be discovered only to be destroyed. Some idea of the great variety of Scottish gold relics may be formed even from the few examples preserved or minutely described; but a much greater number might be noted which are known to have been destroyed, without any opportunity having been afforded even of accurately observing their form, or learning of the circumstances under which they were discovered. The plain gold armillæ from Banffshire, already referred to, and engraved along with the urn in which they lay, in the Archæologia Scotica,[1] furnish sufficiently rude specimens of primitive personal ornaments. Though it can hardly admit of a doubt that they have been designed as armillæ or bracelets, yet the difference in weight, and even more in apparent bulk, sufficiently illustrates the inexperience of their maker. Their respective weights are—1 oz. 5 dwts. 14 grs., and 1 oz. 14 grs. But along with them were examples of one of the simplest yet most interesting class of gold relics discovered in the British Isles. These are described in the Archæologia Scotica as nose and ear-rings, but they are simply formed of bars of gold bent in a circular form, and the extremities left disunited. Two of them are ornamented with parallel grooves along the outer side, but they

[1] Vol. iv. Plate XII.

are of unequal sizes, and in no degree differ from the numerous class of penannular relics now designated by most antiquaries as "ring-money;" though the idea of their use as nose-rings had been formerly advanced by Colonel Vallancey,[1] and has been more than once revived.[2] In a valuable article by Mr. Albert Way, on the ornaments of gold discovered in the British Islands, examples of British ring-money are engraved, including the simple penannular ornament, the crescent, and beaded and torquated rings.[3] It is not necessary to enter at large on the disputed question of the use of these relics as currency. Many ingenious, and as I think satisfactory arguments, have been adduced in favour of their original purpose as a circulating medium; though this was in no degree incompatible with their use as personal ornaments. That such rings passed for money among the Egyptians is proved by representations of the weighing of gold and silver ring-money on their paintings; as, for example, in one of the grottos in the hill of Shek Abd el Qoorneh, which bears the cartouche of Amunoph II. inscribed on its walls. The same metallic currency is obviously alluded to in the incident of the Hebrew patriarchs on their first visit to Egypt: "Every man's money was in the mouth of his sack, our money *in full weight.*" It was perhaps even better suited than a regular coinage for furnishing an acceptable substitute for barter among a comparatively rude people, and may therefore be assumed with considerable probability as one of the improvements resulting from intercourse with the Phœnician traders. Such a system of exchange will also suffice to account for one foreign source of the abundant supply of gold during this primitive era; thus introduced in a form well suited to the imperfect ideas of a people whose trade probably long retained more of the original character of barter than that of sale and purchase, and who would receive the gold rings only as so much metal. There is reason to believe, however, that both in Scotland and Ireland the ring-money continued in use long after Cunobeline and other British princes had sought to rival the Roman mintage. In the Irish annals there is frequent mention of gold rings of different sizes offered at the shrines of Icolmkill, St. Patrick, &c. The inferior metals appear also to have been current in this simple form. Rings of bronze, exactly corresponding to the gold "ring-money," have been found both in the ruins of Persepolis and of

[1] Collectanea de Rebus Hibernicis, vol. vi. p. 270.

[2] Archæol. Journal, vol. vi. p. 57.

[3] Ibid. p. 48.

Carthage, as well as in Egypt. They are well known to Irish antiquaries, and are probably more common in Scotland than is generally supposed. The imperfect bronze rings already referred to among the contents of a cinerary urn dug up in the parish of Ratho, Mid-Lothian, are of this description; and similar relics are occasionally described among the contents of the weems or subterranean dwellings. In 1835 a large tumulus, near the summit of Carmylie Hill, Forfarshire, popularly known as the "Fairy Hillock," was invaded, and among a deposit of half-burnt bones and charcoal several penannular bronze rings were discovered, varying in size from about two inches to two-thirds of an inch in diameter. They are quite plain, as if they had been formed by simply cutting and bending into shape a rod of bronze wire. This ancient and primitive form of currency which we detect along with the first elements of British civilisation, has perhaps never ceased to be used in some parts of the African continent since that remote era when it sufficed for payment of the exactions of the Egyptian Pharaohs. Mr. Way remarks,—"I am indebted to the Duke of Northumberland for the opportunity of examining specimens of African gold money, especially interesting as having been made under his own inspection at Sennaar. His Grace favoured me with the following particulars:—He chanced to notice a blacksmith occupied in forming these rings; and inquiring as to their use, the man replied, that having no work in hand for his forge he was making money. The gold wire being very flexible was bent into rings without precise conformity in regard to weight, and was thus converted into money. It passed current by weight. The gold is so flexible that the rings are readily opened, to be linked into a chain for the convenience of keeping them together, and as readily detached when a payment was to be made."[1] Manillas, as they are now generally termed, are regularly manufactured at Birmingham for the African traders. They are made of copper, or of an alloy of copper and iron, and are sold at the rate of £105 per ton for copper, and £22 for iron rings. The copper ring weighs two and a half ounces, and passes current in Africa at a value equivalent to fourpence sterling. The Banffshire gold relics furnish examples both of plain and grooved ring-money. Of the former class one of about £2 value is described in the Old Statistical Account, found at Tiree, Argyleshire, in 1792.[2] Mr. Paton of Dunfermline possesses a gold torquated ring, obtained

[1] Archæol. Jour. vol. vi. p. 56.

[2] Sinclair's Stat. Acc. vol. x. p. 402.

in that neighbourhood. Another, found in one of the weems or subterranean dwellings on the island of Shapinshay, Orkney, "composed, as it were, of three cords twisted or plaited together," is minutely described in the Statistical Account of the parish;[1] and in the London Numismatic Society's Museum, African gold relics, exactly corresponding to these, are preserved among the primitive types of coinage. Plated rings of similar form have also been occasionally discovered both in Scotland and Ireland, which it is more difficult to conceive of as a substitute for current coin, unless we assume the perverse ingenuity of the forger, usually ranked among the vices of modern civilisation, to be even as ancient as the era of British ring-money. One of these composite penannular relics, in the Museum of the Scottish Antiquaries, was found in the Isle of Skye. It is of copper, covered with a thick plating of pure gold, and when perfect must have bid defiance to detection of its internal inferiority. It is thicker than the usual ring-money, so that the gold has been forced into folds or wrinkles on the inner side in bending it into shape.[2]

The most simple gold ornaments of larger size found in the British Islands are the massive rings with dilated ends, disunited, but generally brought nearly in contact, which are of frequent occurrence in connexion with the rarer objects of the Bronze Period. They are generally assumed to have been worn as armillæ, and to have their ends disunited for the convenience of the wearer. One strong objection to this supposition is to be found in the frequent extension of the dilated edges of the two ends to the inner side of the ring, in a way that must have rendered them exceedingly uncomfortable if worn as armlets.[3] This is the case with one of two fine examples preserved

[1] Sinclair's Statist. Acc. vol. xvii. p. 238.

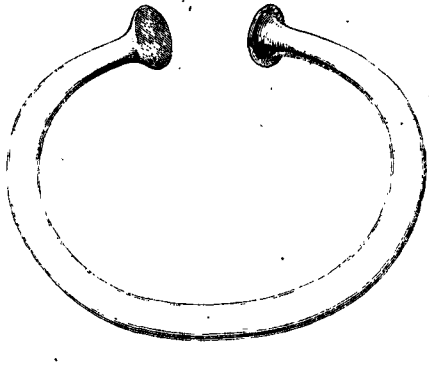
[2] Sir R. C. Hoare describes a somewhat similar plated relic, found in a tumulus near Amesbury, along with objects of gold.—*Ancient Wilts.* vol. i. p. 201, Plate xxv.

[3] This may be assumed possibly as affording some confirmation of a theory suggested to me by an ingenious friend, that these rings were used in *infibulation*; a practice not unknown to the Romans. Martial thus alludes to it, (lib. ix. epig. 28):—

"Occurrit aliquis inter ista si draucus,
Jam pædagogo liberatus, et cujus
Refibulavit turgidum faber penem."

The subject is treated at great length in "Recherches Philosophiques sur les Américains," &c., par M. de P... London, 1771.—"Pour brider les garçons, on leur mettoit dans le prépuce un anneau d'or ou d'argent, tellement rejoint par les extrémités qu'on ne pouvoit plus l'ouvrir qu'avec une lime; et c'est ce que les Romains nommoient *refibulare*."—Vol. ii. p. 123. The same *Recherches Philosophiques* include minute details of several kindred processes under the head, *La manière d'infibuler le sexe,—e.g.*, "Parmi d'autres nations de l'Asie et de l'Afrique, on fait passer par les extrémités des nymphes opposées un anneau, qui dans les filles est tellement enchassé qu'on ne peut le déplacer qu'en le limant," &c.—Ibid. pp. 119-121.

in the Scottish Museum, both found in the same cist at Alloa in 1828; and such also appears from drawings in my possession to be the form of several of a remarkable group discovered in January of the present year (1850) at Bowes, near Barnard Castle, Yorkshire. Relics of the same character, though differing in detail, are found under similar circumstances in Denmark. The dilation of the ends in the examples preserved in the palace of Christiansborg, at Copenhagen, is much more conspicuous than in the British type, being in the form of cones attached by the narrow end to the annular bar of gold, and therefore still less adapted for being worn on the arm. Some specimens are found without this peculiarity, the dilation being only outward, as in one found near Patcham, Sussex, engraved in the Archæological Journal,[1] and another almost exactly corresponding in form, but considerably thicker, found in Galloway in 1784, and of which a drawing is possessed by the Society of Antiquaries of Scotland. These rings are generally much too massive and rigid, notwithstanding the purity and consequent softness of the gold, to admit of their being unbent for the purpose of clasping on the arm, without injuring their form and leaving marks of such a process; in addition to which, another though less conclusive argument against their use as armillæ is, that they are rarely if ever found in pairs. A gold relic, seemingly of this class, was discovered in 1794, on opening a large sepulchral mound at Upper Dalachie, Banffshire, popularly styled the Green Cairn. "About two feet from the surface," says Chalmers,[2] "was found an urn of rude workmanship, which, when the ashes of the dead were shaken out, disclosed a piece of polished gold like the handle of a vase, three inches in diameter, and more than one-eighth of an inch thick." The finder sold this relic for bullion, at the price of thirteen guineas. Where two or more occur together, they generally differ both in size and form, as well as in weight. The two found in the same cist at Alloa,—the largest of which is here represented, half the size of the original,—differ in all



[1] Vol. vi. p. 56.

[2] Caledonia, vol. i. p. 129.

these respects; and the same is the case with those recently discovered at Bowes,—no two of the whole six correspond, though they all lay close together, with what was thought to be the remains of a bag in which they had been inclosed. This will be apparent from the following table of their weights :—

Found at Bowes, near Barnard Castle, Yorkshire, 1850,—

1. Weight 6 oz. 10 dwts. 17 grs.
2. „ 5 „ 12 „ 0 „
3. „ 2 „ 17 „ 12 „
4. „ 1 „ 10 „ 10 „
5. „ 1 „ 10 „ 5 „
6. „ 0 „ 19 „ 15 „

Found at Alloa, Clackmannanshire, 1828,—

1. Weight 3 oz. 4 dwts. 14 grs.
2. „ 2 „ 7 „ 20 „

Found in Galloway, 1784,—

Weight 3 oz. 5 dwts. 5 grs.

Found near Aspatria, in Cumberland,—

Weight 5 oz. 10 dwts. 6 grs.

Found near Patcham, Sussex,—

1. Weight 5 oz. 5 dwts. 12 grs.
2. „ 2 „ 5 „ 6 „

The quality in the metal of the two last, though found in the same locality, greatly differs, the first being largely alloyed with silver. The weights of several other English examples are given by Mr. Way, in his interesting contribution to the Archæological Journal.[1] The record of the precise weights of these curious relics may help to test the theory which has been occasionally advanced, that they also belong to the class of primitive currency; since a uniform rule of sub-division by weight has been thought discoverable in relation to Irish ring-money. The idea, however, seems altogether untenable with reference to these larger rings. The simplicity and gracefulness of the form adhered to, with very slight variations, in a relic of such frequent occurrence, while armillæ, torcs, and even the small penannular rings supposed to have formed the currency of these primitive metallurgists, exhibit so many varieties and modes of decoration, seem rather to point out the former as appropriated to some peculiar and perhaps sacred purpose. What that was we shall probably never know. One example, indeed, found near Aspatria, in Cumberland, in 1828, not only differs in being slightly ornamented

[1] Archæol. Jour. vol. vi. p. 59.

with circular lines and small notches, but certain antiquaries discerned and undertook to read a supposed Runic inscription upon it. It has accordingly been engraved, both in the Archæologia (vol. xxii. p. 439) and in the Archæologia Æliana (vol. ii. p. 268.) But it seems probable that it must rank with the more celebrated Runamo inscription, which, after being proved to be in "the old northern or Icelandic tongue, in regular alliterative verse, of the sort called *Fornyrdalag* or *Starkadarlag*;" its precise date assigned, and its historic value as an authentic document admitted by Danish scholars, is once more acknowledged to be neither more nor less than the accidental cracks and fissures in the rock! A golden relic was, however, discovered during the latter part of last century, of the inscription on which no doubt can be entertained. But it differs essentially in form from the curious rings now referred to, and, indeed, appears to be unique. It is engraved in the Archæologia, (vol. ii. *Plate* III. fig. 4,) and consists of a round bar of pure and very soft and pliable gold, gradually thickening at both ends, which are bent. On the one end is engraved HELENVS F., and on the other, in dotted characters, the letters M. B. It was found about eighteen inches under ground in a moss, on the estate of Mr. Irvine of Cove, near Ecclefechan, Dumfriesshire. The author of the communication in which this is noted, adds, that "several of the same sort have been occasionally found in Scotland, but whether with the same impresses is not mentioned." An observation, however, of this indefinite character, can, at most, be received only in further proof of the well-known fact, that numerous gold relics have been discovered in Scotland from time to time, though most frequently described in terms sufficiently vague and obscure. The *Dilated Penannular Rings* (as I would propose, for the sake of convenience, to call this class of relics) found at Alloa, were discovered, along with two cinerary urns, on the top of a stone cist of the usual circumscribed proportions,[1] in which lay an entire skeleton, of great size, and therefore, it may be presumed, a male. They were accordingly designated by their discoverers Coffin-handles! Other cists, and, in all, twenty-two cinerary urns, some of them of very large size and highly decorated, were found in the same neighbourhood,

[1] The skeleton is described by Mr. James Drummond, surgeon, Alloa, in a letter to the Secretary of the Scottish Society of Antiquaries, of date 8th March 1828, as "bearing no marks of the action of fire, but from the position of the bones, the body must have been placed neck and heels together when interred." A third urn was found a few feet from the cist, filled, like the two others, with ashes and half-burnt bones.

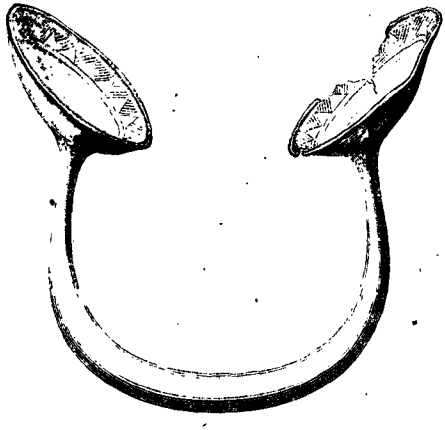
chiefly on the line of the old road from Stirling to Queensferry, where it skirts along the base of Mar's Hill. Another such group of cists has been discovered near the point of Largiebeg, on the south-east coast of the Island of Arran; and in one of them, says the parish minister, writing in 1840, in a cist which a labourer discovered a few years ago, in making a fence round his garden, "there was found a piece of gold in the form of a *handle of a drawer*, with some iron or steel, much corroded, at each end. The man concealed his prize till he got it disposed of to a jeweller in Glasgow, who melted it down into rings and brooches."[1] It would not be difficult to multiply examples, derived from similar sources, of the ignorant and wilful destruction of such relics of primitive native art and skill; but it could answer little other purpose than to excite in every intelligent reader lively but unavailing regrets.

Somewhat analogous to the dilated penannular rings are another class of gold ornaments, which, so far as I am aware, have never yet been discovered except in the British Isles. They consist of a solid cylindrical gold bar, bent into a semicircle or segmental arc, most frequently tapering from the centre, and terminated at both ends with hollow cups, resembling the mouth of a trumpet, or the expanded calix of a flower. One remarkable example of these curious native relics, which is engraved in the Archæological Journal, presents the characteristics of an intermediate type between the simpler forms of the relics last described, and these *Calicinated Rings*.[2] The cups are formed merely by hollows in the slightly dilated ends; but it is further interesting from being decorated with the style of incised ornaments of most frequent occurrence on the primitive British pottery. It was dug up at Brahalish, near Bantry, county Cork, and weighs 3 oz. 5 dwts. 6 grs. In contrast to this, another is engraved in the same Journal, found near the entrance lodge at Swinton Park, Yorkshire, scarcely two feet below the surface. In this beautiful specimen the terminal cups are so unusually large, that the solid bar of gold dwindles into a mere connecting link between them. The annexed figure of a very fine example found by a labourer while cutting

[1] New Stat. Acc. vol. v. Buteshire, p. 23.

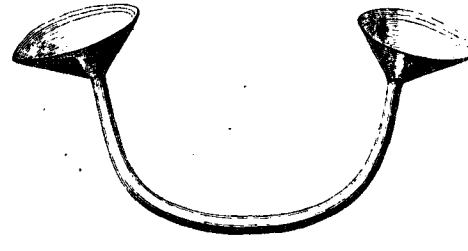
[2] Archæol. Journal, vol. vi. p. 60. It is only from analogy, and the want of more appropriate terms, that these relics can be called rings, many being less than semicircles. Possibly, however, the term suggested in the text may suffice to designate them by, at least till the establishment of some theory as to their use shall supply a more precise name. The term *calicinated fibulæ* would be preferable, did it not assume a use still open to challenge.

peats in the parish of Cromdale, Inverness-shire, somewhat resembles that of Swinton Park in the size of its cups. It is from a drawing by the late Sir Thomas Dick Lauder, and represents it about two-thirds the size of the original. Similar relics of more ordinary proportions have been brought to light, at different times, in various Scottish districts. One found in an urn in the north of Scotland, in the year 1731, is described in a letter from Sir John Clerk to Mr. Gale, written shortly after its discovery; and is further illustrated in the Reliquiæ Galeanæ, by an engraved figure the size of the original.[1] Shortly afterwards, Sir John Clerk writes to his correspondent announcing the discovery of several valuable gold relics, including two other calicinated rings, brought to light in consequence of the partial draining of a loch on an estate belonging to the Earl of Stair. "I begin to think," exclaims the astonished antiquary, "that there are treasures of all kinds in Britain; for lately in a loch in Galloway there have been found three very curious pieces of gold: one a bracelet, consisting of two circles, very artificially folding or twisting into one another; now in the hands of the Countess of Stair." The other relics are described as corresponding to an example of the calicinated ring found in Galway, and engraved in the Archæologia. (Vol. ii. *Plate* III. fig. 1.) One of these must have been an unusually massive and valuable example, as its weight is stated to have been 15 oz. Another smaller one found along with it, and weighing only 1 oz. 4 dwts., more nearly approaches to the type of the dilated penannular ring, the cup or bulb being covered with a flat oval plate of gold. A bronze relic, of the latter shape, formerly in the collection of Dr. Samuel Hibbert, is now in the Museum of the Scottish Antiquaries. Bronze calicinated rings have occasionally, though very rarely, been found in Ireland. The only example I know of is in the collection of Councillor Waller of Dublin.



[1] Bibliotheca Topog. Brit. vol. ii. p. 280. Plate VI. fig. 5.

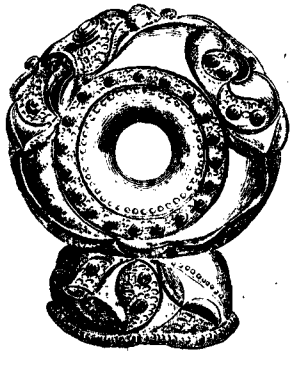
The most recent discovery in Scotland of gold relics of this singular type, was made in the year 1838, on the estate of the late Walter Campbell, Esq. of Sunderland, on the Island of Islay, Argyleshire. At the period referred to, a large standing stone, which had long been overthrown, and lay prostrate at a little distance from Sunderland House, was blasted with gunpowder, and removed, in the process of levelling and draining the ground for agricultural purposes. The soil immediately underneath the stone consisted of a rich black mould, in which were found a broad fluted gold armilla, and a fine specimen of the calicinated ring, both lying alongside of a stone cist, within which were several rude cinerary urns. The armilla was of a peculiar type, being a broad band of gold beaten out so as to form a convex centre, on each side of which was a fluted ornamental border, and a raised rim returned at the edge. Unfortunately, this interesting relic was carried off by a dishonest servant, but through the kindness of Mrs. Campbell, I am able to give the annexed representation (about one-fourth the size of the original) of the calicinated ring, which is now in that lady's possession. Mrs. Campbell remarks, in a letter with which I have been favoured,—"The bracelet was large enough to encircle a woman's arm above the elbow. Of many specimens which I examined at the British Museum, chiefly Irish, there was none like mine, which makes me the more regret its loss." Various tumuli exist in the neighbourhood of Sunderland House, several of which have been opened, and found to cover cists of the usual limited size, none of them exceeding three feet in greatest internal dimensions. In some of them were found cinerary urns, while others contained the entire skeleton.



Some antiquaries have sought to assign a sacred significance to these singular relics, and to associate them with the mysterious rites of Druidical worship. Vallancey, in particular, supposes them to have been sacrificial pateræ. There is fully as much probability, however, in the simple conjecture that they served as clasps or fastenings for the mantle. The cups, which appear to possess such a mystic significance, were not probably left void in their original state. In the

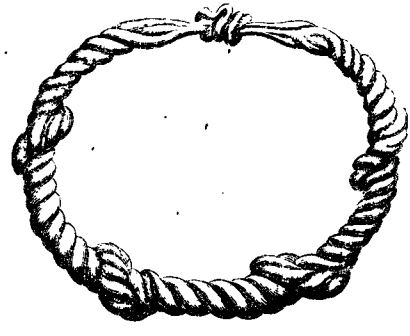
example first referred to, in the Reliquiæ Galeanæ, Sir John Clerk remarks,—"The parts at the extremities are hollow, like little cups or sockets, and the sides are very thin. There is a small circle within the verge, which has had a red substance adhering to it like cement, as if it had served to fix some kind of body within the sockets." A similar appearance is still more markedly observable in an example in the possession of Thomas Brown, Esq. of Lanfine, Ayrshire. Upon showing it to an experienced jeweller, he assured me it cannot admit of a doubt that the sockets have originally contained pebbles or jewels. If it be indeed the case that in this curious gold relic we have the clasp of the ancient British chlamys, worn by the native chief or by the archpriest when robed in his most stately pontificals, then we see in it a British personal ornament which may stand comparison with the most costly and elegant Roman fibulæ, while its essential dissimilarity from every known classic type adds to the probability of its belonging to an earlier era than the Anglo-Roman period.

Of the commoner British gold ornaments, the torc and armilla, numerous examples have been discovered, though of these the few which have escaped destruction are mostly in private hands, and not very readily accessible. Three beautiful gold torcs, found at Cairnmure, Peeblesshire, in 1806, are figured in the Archæologia Scotica.[1] They were found, along with various other relics, by a herd-boy, who going early in the morning to his sheep, observed something glitter in the sun, and on scraping with his feet, brought the whole valuable treasure to light. It consisted of three gold torcs or collars for the neck; the beautiful gold ornament, supposed to have been the head of a staff or sceptre, engraved here about one-half the size of the original; and a number of flattened circular gold pellets, each marked with a cross in relief. The value of the articles discovered in mere bullion exceeded £100, and it is doubtful if the treasure-finder did not privately dispose of more before his good fortune was known. The staff-head and two of the gold beads or pellets are now in the Museum of the Scottish Antiquaries. The latter are elsewhere re-



[1] Vol. iv. p. 217, Plate x.

ferred to, along with other examples, as the primitive type of native minted currency. The defined character, however, of the ornamentation on the sceptre-head adds, along with the presence of these indications of increasing civilisation, to the probability that this valuable hoard belongs to the later transition-period, in which the age of bronze drew to a close. Simple indeed as is the usual style of ornament and workmanship of the funicular torc, it appears to have been retained in use for a very long period, and is reproduced in silver and bronze along with the latest relics of the succeeding iron age. The annexed woodcut represents a remarkably fine example, greatly reduced, of what may be designated the knotted funicular torc. It was found about sixty years ago by a labourer trenching within the area of a circular camp on the summit of a hill in the parish of Penicuick, Mid-Lothian, known by the name of Braidwood Castle. It was of gold, and met with the usual fate of relics of the precious metals, having been sold by the discoverer to a jeweller in Edinburgh for the sum of twenty-eight guineas, as a Roman girdle of *brass*. It was doubtless worth a much larger sum as mere bullion. A drawing of it, however, had been taken, it is not now apparent by whom, and is preserved in the Library of the Scottish Antiquaries.[1] The history indeed of Scottish gold relics is only a sad commentary on the miserable fruits resulting chiefly from the operation of the law of treasure-trove. A short way to the east of Chesterlees Station, in the parish of Dolphinton, Lanarkshire, an ornament of pure gold was found, which is said to have resembled the snaffle-bit of a horse's bridle.[2] As this is usually a twisted iron rod, there can be little doubt that the Chesterlees relic was a funicular torc. A "gold chain" ploughed up on the glebe lands of Mortlach parish, Banffshire, and described in the Old Statistical Account of the parish, as "like an ornament for the neck of one



[1] The drawing is simply marked "a gold collar found at Braidwood Castle, Edinburghshire," but there can be little doubt of its being the same referred to in the text. The additional particulars concerning it have been communicated to me by a lady who had often heard of this discovery in her younger days, as one of the remarkable events of her native place.

[2] New Statist. Acc. vol. vi. p. 57.

of the chiefs;" and another "golden chain" found at Thrumster, in the parish of Wick, Caithness, "which in a year of famine the discoverer sold to a bailie in Wick for a boll of oatmeal," may both be assumed, with little hesitation, to have been golden torcs. The term, indeed, has been used by experienced antiquaries. Gale describes a torc found near Old Verulam in 1748, as "a wreathed or vermicular ornament, being a solid chain of gold." One example, however, is on record of a gold linked chain found in an early Scottish sepulchral deposit. Nearly a mile to the east of Newton of Tillicairn, Aberdeenshire, on the top of a ridge on which are several cairns, there is one of unusually large size, appropriately designated Cairnmore. In 1818 this was partially opened to obtain a supply of stones for building materials, when a quantity of bones were found, among which lay "a small gold chain of four links, attached to a pin of such size as might have been used in a brooch for fastening the Celtic plaid."[1] A relic found towards the close of last century on the farm of Balmae, Kirkcudbrightshire, and sold by the discoverer for about £20, may also be classed among the lost examples of Scottish gold torcs. It is described as "a straight plate of gold, which was somewhat thick at each end and at the middle. It bent easily at the centre, so as to admit the two extremities to meet."[2] It must either have been a solid torc, or an unusually large dilated penannular ring. Amongst the native personal ornaments in the Scottish Museum, is a massive but plain penannular ring of the class to which the name of solid torc is now applied. It appears to be composed of nearly pure copper, and weighs twenty-five and a quarter ounces. It is rudely finished, retaining the rough marks of the hammer.

No less beautiful than the finest examples of gold torcs are the numerous armillæ which have been found in Scotland. Two funicular bracelets, discovered apparently on draining the same lake in Galloway previously referred to, are described and engraved in the Reliquiæ Galeanæ. Sir John Clerk, writing from Edinburgh in 1732, remarks,—"Since my last to you I have seen two other bracelets and a large ring, found on the draining of a lake or part of it. There are no letters or inscription, and the make is very clumsy. Each bracelet is in weight six or seven guineas, and their shape thus,[3] of two pieces of gold twisted. The ring is large, and about a guinea in weight."[4]

[1] New Statist. Acc. vol. xii. p. 1061.
[2] Sinclair's Statist. Acc. vol. xi. p. 24.
[3] Biblio. Topog. Brit. vol. ii. Plate vi. fig. 8.
[4] Ibid. p. 299.

Another example found about forty years ago in Argyleshire was sold for a trifle to a Glasgow goldsmith, and consigned to the crucible.[1] In 1834, some workmen quarrying stones near the bridge over Douglas Water, Carmichael, Lanarkshire, discovered a pair of armillæ weighing twenty-nine sovereigns, which were destined to the same fate; but fortunately the Marquess of Douglas learned of the discovery in time to repurchase them ere they had been converted into modern trinkets, and they are now safe in that nobleman's possession. Mr. Albert Way illustrates his communication to the Archæological Journal, "On Ancient Armillæ of Gold," &c., with an engraving of one of a very beautiful pair, found in 1848 on the estate of Mr. Dundas of Arniston, at Largo, in Fifeshire, of the same type as those previously discovered in the Loch of Galloway. Mr. Way remarks of them,—"These beautiful ornaments are formed of a thin plate or riband of gold, skilfully twisted, the spiral line being preserved with singular precision. It would be easy to multiply examples of torc ornaments more or less similar in type found in this country, and especially in Ireland; but none that I have seen possess an equal degree of elegance and perfection of workmanship."[2] Mr. Dundas furnishes the following interesting note in relation to the discovery:—"The gold bracelets were found last winter on the top of a steep bank which slopes down to the sea, among some loose earth which was being dug to be carted away. The soil is sandy, and the men had dug about three feet, where the bracelets lay. It was at a place close to the sea-shore, called the Temple, which is part of the village of Lower Largo. An old woman who has lived close to the spot all her days, says that in her youth some coffins were found there, and one man was supposed to have found a treasure, having suddenly become rich enough to build a house." The neighbourhood of Largo Bay is celebrated in the annals of Scottish Archæology for one of the most remarkable hoards ever discovered, described in a later chapter as the "silver armour of Norrie's Law." Only a very small portion of this collection was rescued from the crucible; and the moiety of the Largo Bay relics which escaped the same fate appears to have been even less, if we may credit the extremely probable tradition of the locality. With the wonted perverse modesty of Scottish antiquaries, Mr. Dundas accompanies his account of the latter discovery with a reference to the advantages of the neighbouring bay as a safe anchor-

[1] New Statist. Acc. vol. vii. p. 206.

[2] Archæol. Journal, vol. vi. p. 54.

'age, and the probability of its having been a favourite landing-place of the northern freebooters. How strange is it, that rather than believe in the possibility of the existence of early native art, this improbable theory should have been fostered and bandied about by intelligent writers without contradiction for upwards of a century. If there were no native arts and costly treasures, what, it may be

Large Armilla.

asked, brought northern freebooters to our shores? Surely some less extravagant hypothesis may be suggested than that they crossed the ocean to bury their own golden treasures in our sands. It would seem, on the contrary, to afford undoubted evidence of a tumulus or sepulchral chamber being the work of natives or of resident colonists when it is found to contain objects of value. Only the confidence inspired by the universal recognition of the sacredness of such deposits could induce the abandonment of them under cover only of a few feet

of soil. It was not until a very late period—towards the end of the ninth century—that the northmen established a footing even on the remoter Scottish islands; while their possession of any but a very small portion of the mainland in the immediate vicinity of their Orkney possessions was so brief and precarious, that it might well excite our surprise to discover any traces of their presence on the shores of the Forth.

A variety of independent proofs, some of which have already been referred to, amply justify the archæologist in assigning the relics of the Archaic Period of British art to an era long prior to that of the Scandinavian Vikings. But there is not wanting evidence to shew that at the latter period also golden armillæ and other native personal ornaments were common in Scotland, and, indeed, frequently furnished the chief attractions not only to the piratical Vikings who first infested our shores, but to the more civilized northmen who supplanted them, and established trading colonies in the northern and western isles. Though the full consideration of the influence of Scandinavian aggression on early Scottish history belongs to a subsequent section, it will not be out of place to glance at some of these proofs here, tending as they do to shew that there is in reality greater probability in favour of some of the gold relics found in Denmark and Norway being of British origin, than that our native relics should be ascribed to a Scandinavian source.

Snorro tells us of two thanes from *Fiord-riki*, or the kingdom of the bay, as the southern coast of Fife was called, who, dreading the descent of Olave of Norway on their shores, put themselves under the protection of Canute. Snorro's account is literally,—"To Canute came two kings from Scotland in the north, from Fife; and he gave them up his, and all that land which they had before, and therewith received store of winning gifts, (*vingiafir.*) This quoth Sigvatr—

'Princes, with bowed heads,
Have purchased peace from Canute,
From the coast,
From the midst of Fife, in the north.'"[1]

Ringa eldingham, or bright rings, are frequently mentioned among the spoils of the Norse rovers; but it is not always easy to tell whether they refer to ornamental rings and bracelets, or to tribute paid with ring-money. In the Norwegian account of Haco's celc-

[1] Notes to "Lodbrokar-Quida." Rev. J. Johnstone. Denmark, 1782.

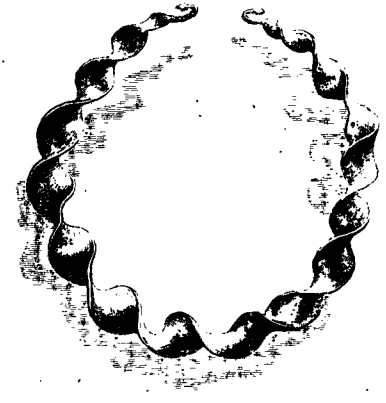
brated expedition against Scotland, A.D. 1263, frequent allusions occur to such golden spoils, and especially in the extracts from the "Raven's Ode," a song of Sturla, the Scandinavian bard, whose nephew, Sigvat Bodvarson, attended Haco in this expedition, and most probably supplied to Sturla materials for the narrative of his poem. The Scottish foes are described as terrified by "the steel-clad exactor of rings;" and Haco's reduction of the island of Bute is thus celebrated:—"The wide-extended Bute was won from the forlorn wearers of rings by the renowned and invincible hosts of the promoter of conquest. They wielded the two-edged sword; the foes of our Ruler fell, and the raven, from his field of slaughter, winged his flight for the Hebrides."[1] We find also, in the same poem, Haco restoring the island of Ila to Angus on similar terms to those by which the favour of Canute was purchased:—"Our sovereign, sage in council, the imposer of tribute and brandisher of the keen falchion, directed his long galleys through the Hebrides. He bestowed Ila, taken by his warriors, on the valiant Angus, the distributor of the beauteous ornaments of the hand," *i.e.*, rings or bracelets. Here then we find the northern bard scornfully designating the Scottish foemen as "the forlorn wearers of rings," and their tributary chiefs as the "distributors of the beauteous bracelets." It is by the same name claimed by the Scandinavian poet, "exactors of rings," that the early Irish bards describe the northern warriors who infested their coasts from the ninth to the eleventh centuries; while older allusions abundantly prove their familiarity with the "rings" long before the first descent of the Vikings on their shores. An interesting passage illustrates this in an ancient MS. of the Brehon Laws, preserved in the Library of Trinity College, Dublin. The reference is to the wife of Nuada Neacht, King of Leinster, in the first century:—"The Righ of the wife of Nuada, she was used to have her hand (or arm) covered with rings of gold for bestowing them on poets."[2] It is abundantly manifest, therefore, that native artists had learned at a very early period to fabricate the golden armilla, so that the theory of Danish, or of any other foreign origin for these ancient relics, may at once and for ever be dismissed as equally unnecessary and untenable.

Returning from this digression, which more properly belongs to the succeeding section, I am fortunately able, through the kind services

[1] Haco's Expedition, Rev. J. Johnstone, p. 65.

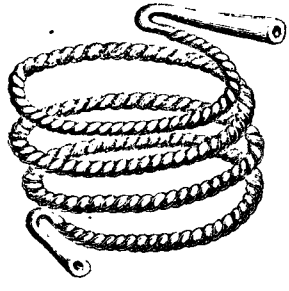
[2] Ecclesiastical Architecture of Ireland. 8vo. P. 215.

of Sir James Ramsay, Bart. of Banff, to present an engraving of another gold armilla, of the same type as those discovered at Largo, in Fifeshire, but found alike remote from any convenient anchorage, or from any known Norwegian settlement on the Scottish shores. It is now the property of Lady Menzies, and though inferior in point of workmanship to those found at Largo, is an exceedingly tasteful example of primitive skill. The original bears obvious traces of the rough marks of the hammer, though they interfere very little with the beautiful reflected lights which its elegant spirals produce. It was found in the north-west of Perthshire, in what is described in Chambers' Gazetteer as "the black wilderness called the Moor of Rannoch; a level tract of country sixteen or twenty miles long, and nearly as many broad, bounded by distant mountains; an open, silent, and solitary scene of desolation; an ocean of blackness and bogs, with a few pools of water, and a long dreary lake." Yet how many such evidences may it contain of an era when the Scottish bogs were luxuriant forests, and such relics were the personal ornaments of the hunters that pursued the chase through their sylvan glades, or of the maidens and matrons that awaited their return! The Rannoch armilla is of sufficient size to encircle a lady's arm; and though exhibiting unmistakable traces of the imperfectly developed art and mechanical skill of the Archaic Period, its beauty is sufficient, in the estimation of its present noble owner, to induce her frequently to wear it along with the more elaborate productions of the modern jeweller's skill. A still more beautiful armilla, of a different type, and manifestly belonging to a later and more perfectly developed era of art, was discovered in 1846, at Slateford, about three miles west from Edinburgh, during the progress of the works required in constructing the Caledonian Railway. The labourer who found it decamped immediately with his prize. It was shewn by him to the Treasurer of the Society of Antiquaries of Scotland, but while negotiations were pending for its purchase, the discoverer



Rannoch Armilla.

took fright under the apprehension of having his spoil reclaimed, and before the clue could be recovered, it was consigned to the melting-pot. It was justly described by the distinguished Danish antiquary, Mr. Worsaae, who saw it during his visit to Scotland, as a relic that would have adorned any museum in Europe. Its loss affords another painful evidence of the necessity for some modification of the Scottish law of treasure-trove, as well as for a comprehensive system for the preservation of primitive works of native art. Fortunately a facsimile was made of it previous to its destruction, and is now preserved in the Scottish Museum. Torcs of a similar type, terminating in solid cylindrical ends, are described by Mr. Birch as not uncommon, and are referred to a late period, possibly the fourth or fifth century.[1] Unfortunately no account could be obtained of the circumstances under which the Slateford Armilla was discovered. One nearly similar, found in Cheshire, and now in the possession of Sir Philip de Grey Egerton, is engraved in Dr. Smith's "Dictionary of Greek and Roman Antiquities," with other so-called Roman relics of unquestionable native origin.



Slateford Armilla.

The bronze armillæ clearly assignable to the Archaic Period are mostly of a very simple character, consisting either of solid or penannular rings, or more rarely of a thin spiral band of the metal. They are much rarer, however, in any form than those of gold. The following account of the discovery of bracelets *in situ*, in the parish of Glenholm, Peeblesshire, is possessed of peculiar interest, though we have to regret, as in so many other instances, the absence of more precise information. "There is a plain by the side of Tweed on which there are several mounts, apparently artificial. The proprietor had the curiosity to cause one of them to be digged, and there found the skeleton of a man, with bracelets on his arms. The body was inclosed in a stone building, with a stone cover, and nigh him was an urn."[2] In another grave opened at Westray in Orkney, a gold ring was found encircling one of the thigh-bones of the skeleton.[3] Similar examples are familiar to Scandinavian antiquaries.

[1] Archæological Journal, vol. ii. p. 379.

[2] Sinclair's Statist. Acc. vol. iv. p. 435.

[3] Nenia Britannica, p. 76. In the Guide to Northern Archæology, p. 54, reference is

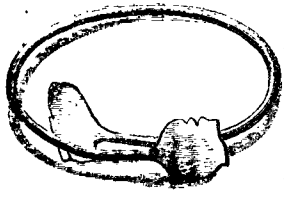
The torc as well as the funicular armilla and other relics of corresponding type, though known to the Romans, were regarded by them as barbarian decorations. Like so many others of the characteristic peculiarities of the Celtæ, they are clearly traceable to an Eastern origin. The torc is introduced at Persepolis among the tribute brought to Darius; and in the mosaic of Pompeii, Darius and his officers are represented wearing it at the battle of Arbela.[1] Titus Manlius Torquatus took the golden torc from whence he derived his name from a Gaul he slew in single combat B.C. 361: and its first appearance in Italian art is round the neck of the moustached Gaulish hero, whose head forms the obverse of the As of Arminium, decorated probably according to the fashion of his country, four centuries before the Christian era. Still more interesting is its occurrence on the neck of the dying gladiator, the masterpiece of Ctesilaus. In this historic example of the torc, it is funicular with bulbous terminations, resembling one seen on the Sarcophagus of the Vigna Amendola, representing, as is believed, the exploits of the Romans over the Gauls or Britons. So far then from the torc being either Romish or Danish, it may be regarded as the most characteristic relic of primitive Celtic and Teutonic art, brought with the British Celtæ from the East centuries before the era of Rome's foundation, and familiar only to the Roman as one of the barbaric spoils which adorned the procession of a triumphant general, or marked the foreign captive that he dragged in his reluctant train.

In addition to torcs, armlets, and other ornaments for the neck and arms, metal rings of various kinds have been found in Scotland as in other countries, to which, though apparently designed for personal ornament, it is more difficult to assign an exact purpose. Several of these will fall to be described in the following section, as from their well defined characteristics more probably pertaining to the latest Pagan era; but others completely agree in their archaic style and workmanship with undoubted relics of the Bronze Period. To this class belong various bronze rings, generally with broad expanded ends overlapping each other, corresponding to a well-known class of continental antiquities, which the northern archæologists believe to have

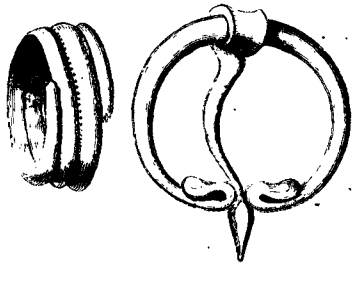
made to similar discoveries in Denmark; and I am informed by Dr. Ludwig Becker of a skeleton with several penannular bronze rings on the arm bones, found recently in a large tumulus near Mayence.

[1] This interesting inquiry is entered on at large by Mr. Samuel Birch, in two able articles on the Torc of the Celts. Archæological Journal, vol. ii. p. 360, and vol. iii. p. 27.

been worn about the head and entwined with the hair. Two of these, of very rude workmanship, now in the Museum of the Scottish Antiquaries, were found a few years since about 300 yards from a large cairn, in the parish of Lumphanan, Aberdeenshire, which popular local tradition affirms to mark the spot where Macbeth fell by the hand of the Thane of Fife. One of these is figured here on a small scale. Its dimensions, however, are abundantly sufficient to admit of its encircling the head, and both ends terminate in broad flattened plates, probably designed to rest on the forehead. Similar features occur in those of a later date and much more ornamental character, some of which are referred to in a future chapter. With this class also may be noted, among the relics belonging to the period in the same collection, an annulus of bronze, hollowed on the under side, measuring two and three-fourths inches in greatest diameter; and several bronze rings of various sizes, the largest three and a quarter inches in diameter, found in an urn in the parish of Kinneff, Kincardineshire.



Smaller personal ornaments were also made of bronze, and occur among the works of a later period frequently characterized by great beauty of form and delicacy of ornament. The woodcut represents a bronze ring-fibula, of simple but somewhat peculiar design, and a spiral bronze ring, both the size of the originals. They were found about nine years since, during the construction of a new road leading from Granton Pier to Edinburgh, in a small stone cist, distant only about twenty yards from the sea-shore. It contained two skeletons, which from the position of the bones and the square and circumscribed form of the cist, appeared to have been interred in a sitting posture. Mr. C. R. Smith has figured a bronze fibula of the same type, though of ruder workmanship, among the numerous relics pertaining to various periods found at Richborough in Kent.[1] Several examples of the spiral finger-ring have



[1] Antiquities of Richborough, Reculver, and Lymne, p. 85.

been found in Britain with remains of different periods. They are also known to northern antiquaries among the older relics of Denmark and Sweden. This may indeed be regarded as one of the earliest forms of the ring, since it is only at a comparatively late period that we discover any traces of a knowledge of the art of soldering among the native metallurgists. A silver ring of the same early type, formed one of the personal ornaments in the celebrated Norrie's Law hoard, found on the opposite shores of the Frith of Forth.

Hair-pins and bodkins are another class of relics contained in the tombs of this period, generally of bronze, though they have occasionally been met with, and especially in Ireland, both of gold and silver, and richly set with jewels. Charles Kirkpatrick Sharp, Esq., has in his possession three magnificent ornaments of the latter class, formerly in the collection of Major Surr, such as might rival the most costly and elaborate works of the modern jeweller. Among the rarest and most curious forms of the bronze pin is that with a head hollowed like a cup; one of which has already been referred to, found along with a variety of other bronze relics, in a bog in the Isle of Skye, and now in the possession of Lord Macdonald. It exactly corresponds to an Irish example engraved in the Archæological Journal. Others have the head decorated with a variety of grooves and mouldings, and occasionally perforated, as if for attaching to them some pendulous ornament. Perforated bronze implements are likewise found, which it can hardly be doubted were used as needles; and among the rare and most perishable contents of the tumuli have occasionally been recovered small fragments of knitted or woven tissues, the productions of the primitive weaver whose bones crumble into dust on being exposed, and almost literally vanish before our eyes. Douglas engraves in the Nenia some interesting fragments of such ancient manufactures, of the herring-bone pattern, found on opening some tumuli in Greenwich Park. But by far the most perfect specimen I have ever seen was procured by Dr. Samuel Hibbert, about the year 1838, from some labourers who had found it on the chance exposure of a stone cist, while excavating for railway work, near Micklegate Bar, York. This valuable relic is now in the Museum of the Scottish Antiquaries. It appears to be a sleeve, or the covering for the leg, and somewhat resembles the hose worn by the south-country Scottish farmers, drawn over their ordinary dress as part of their riding gear. It has been knitted, a process which doubtless preceded the art of

weaving, probably by many centuries. The fabric is still strong, and, in careful keeping, may long suffice to illustrate the domestic manufactures of the ancient Briton. This is one of the examples to which reference has been made in a former chapter, as shewing the source to which it is conceived some of the ornamental designs on the early British pottery are traceable; though the resemblance is less striking here than in some more imperfect specimens of such products of the primitive knitting needle or loom. The accompanying woodcut, representing a portion of the knitted fabric, will enable the reader who is familiar with the style of ornamentation on the pottery of the tumuli, to judge for himself how far this idea is justified by the correspondence traceable between them.

In 1786 a much more complete specimen was found, seventeen feet below the surface of an Irish bog in the county of Longford. It is described by Mr. Richard Lovell Edgeworth, in a Report to the Commissioners for improving the bogs in Ireland, as "a woollen coat of coarse but even net-work, exactly in the form of what is now called a spencer." Iron arrow-heads, large wooden bowls, some only half made, with what were supposed to be the remains of turning tools, lay alongside of it. The coat was presented by Mr. Edgeworth to the Society of Antiquaries, but is no longer known to exist. Possibly it rapidly decayed, as all such relics must be apt to do on exposure to the air; or perchance its history was lost sight of, in which case its value would appear very slight in the estimation of the ordinary class of curators.

In 1822 Professor Stuart of Aberdeen communicated to the Society of Antiquaries of Scotland an interesting account of the opening of a tumulus at Fetteresso, Kincardineshire.[1] Within it was found a stone cist about four feet in length, containing a skeleton, with the legs so bent back that the knees almost touched the lower end of the cist. The bottom was strewed with round sea pebbles from the neighbour-

[1] Archæologia Scotica, vol. ii. p. 462.

ing beach. Above this appeared some vegetable substance, in which the body had been imbedded, and over that, covering the whole, a tissue of wrought net-work, beautifully executed, but which, along with all the other contents, crumbled to dust soon after being exposed to the air. A great number of small black balls were found surrounding the body, plainly vegetable, and described as closely resembling acorns. At the top of the cist there seemed to have been placed a fresh sod or turf, which still retained the impression of the head that had been pillowed on it ages before, though no parts of the skull, nor even any of the teeth, were found. Some of the hair, however, four or five inches long, and of an auburn colour, still remained, and over the breast were seen the remains of a small box of an oval shape, apparently of wood elegantly carved; but this also speedily crumbled to powder. In the month of November 1847, another cist was discovered about an hundred yards to the south of the Fetteresso tumulus, which may with much probability be assumed as a female grave; and if so, adds another to the examples already noted of the occurrence of the Scottish sepulchral urn accompanying female remains. The cist measured only three feet in length, by two feet in breadth, and contained a human skeleton which appeared to have been laid on the right side with the face to the south. The limbs were bent according to the usual disposition of the body in the circumscribed cist, and one of the leg bones seemed to have been broken. A rude urn, about six inches deep, lay as if it had been folded in the arms of the deceased, and upwards of a hundred jet beads, which had no doubt formed a necklace, were found beside the breast.

CHAPTER VII.

SEPULCHRES.

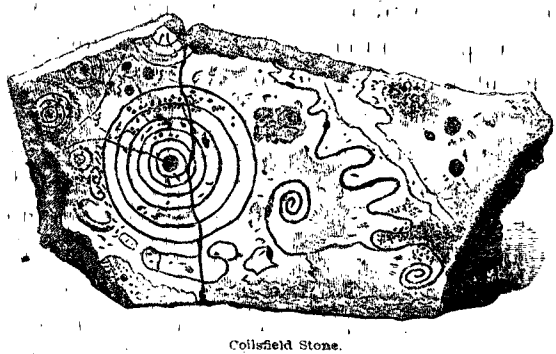
THE tombs of the Bronze Period appear to differ, in various important respects, from those which are clearly assignable to the Primeval Period. Some of their peculiar features have already been noticed, in describing the circumstances under which sepulchral pottery and their relics have been met with; but others equally characteristic of the first era of development and progress remain to be described. To this epoch, as has been already observed, it seems probable that we must assign the introduction of the practice of cremation, while the huge cromlechs and chambered barrows and cairns, appear to have been abandoned along with the simpler rites of primitive inhumation, for the smaller cist and cinerary urn. To this period also we can have little hesitation in ascribing the earliest attempts at sculpture or inscription which are met with on primitive sepulchral memorials. The two most remarkable examples of sculptured monolithic structures hitherto explored are the celebrated chambered cairn of Newgrange, in the county of Meath, and that on the small island of Gavr' Innis in Brittany. These gigantic and complicated works appear indeed to pertain to the transition between the Primeval and Archaic Periods, and partake at once of the earliest cyclopean characteristics and the later ornamental decorations.

An abridged extract of the account furnished by Mr. J. W. Lukis of the remarkable structure of Gavr' Innis will best illustrate the peculiar features of such decorated sepulchral chambers. Gavr' Innis is a small island, about a quarter of a mile in length, situated in the department du Morbihan, Brittany. It is elevated somewhat above the

neighbouring islands, and with its tumulus, which still covers the cromlech, forms one of the most conspicuous objects of the inland Archipelago. The tumulus is about thirty feet high, and three hundred feet in circumference. The cromlech beneath forms a large central chamber, with a passage, constructed like it of huge masses of granite, leading out to the south side of the mound.

"Being furnished," says Mr. Lukis, "with candles, I entered the cromlech Gavr' Innis by a small opening at the south end, which is between three and four feet wide, by about the same in height. Having reached the third and fourth props, my attention was at once arrested by finding them covered with engraved lines, forming patterns resembling the tatooing of the New Zealander. On proceeding farther into the interior the height increased, rendering the passage to the end more easy; and I found nearly the whole of the props covered with similarly engraved lines. Here there is much to excite admiration at the regularity and beauty of so extraordinary a place; and on turning to a prop on the western side, the imagination is farther exercised to perceive the purpose or use of three circular holes, sunk into the face of the stone, each about six inches deep, and the same in diameter: they communicate with each other, and form a sort of trough within the stone. It is divided in front by two raised parts resembling in form the handles to a jar."[1]

Other cromlechs in Brittany are similarly decorated; and Mr. Lukis arrives at the conclusion that in some of them the stones must have been engraved prior to their erection, from the ornaments extending round the sides which are now covered by adjoining stones. The sculptured decorations at Newgrange are no less remarkable, and the same observation has been made in regard to them, that the carvings

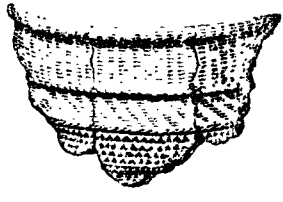


Collsfield Stone.

must have been executed before the stones upon which they appear had been placed in their present positions. We shall not probably err

[1] Journal of the Archæological Association, vol. iii. p. 272.

in assigning as contemporaneous works with these rare and most primitive examples of sculptured sepulchral chambers, the rude cists occasionally found decorated with similar devices, though otherwise entirely unhewn. The annexed view of one of these incised slabs is engraved from a drawing presented to the Royal Society of Edinburgh by Colonel Hugh Montgomery of Shielmorly, in 1785, and subsequently transferred to the Society of Antiquaries. It formed the cover of a cist, discovered in digging a gravel-pit at Coilsfield, in Ayrshire, and underneath it was found an urn filled with incinerated bones. The dimensions of the stone were about five feet in length by two and a half feet in breadth. The original drawing includes the representation of the portion of the urn shewn here, which it will be seen presents only the usual characteristics of primitive sepulchral pottery. A subsequent discovery of cinerary urns at the same spot has been assumed to authenticate one of the many dubious incidents recorded by our earlier chroniclers in relation to a no less celebrated hero than "Old King Coil." Near Coilsfield House is a large tumulus, crowned with two huge blocks of granite, which local tradition affirmed to mark the place of sepulture of the redoubted hero, of whom Boece records,—"King Coyll, unwarly kepit be his nobilis, was slane, in memory wherof the place quhare he was slane wes namit efter Coyll; quhilk regioun remanis yit under the same name, or litill different thairfra, callit now Kyle."[1] Certain zealous local antiquaries having resolved to put tradition to the test, the tumulus was opened in 1837, and found to inclose a cist covered by a circular stone about three feet in diameter, beneath which four plain urns were disposed, the largest of which measured nearly eight inches in height. The author of a recent topographical work on the district of Kyle has gravely assumed this discovery as giving "to the traditionary evidence, and to the statements of early Scottish historians in regard to Coil, *except with respect to the date,* a degree of probability higher than they formerly possessed!"[2] What more might not the antiquaries of Kyle have been able to establish had they known of the older discovery on the same spot, and of the mysterious symbols traced on the sepulchral stone!



[1] Bellenden's Boece, book i. chap. ix.

[2] Land of Burns, vol. i. p. 82.

Another cist, decorated with concentric circles in a manner nearly similar to the Coilsfield stone, was exposed a few years since in constructing the road which leads from South Queensferry through the Craigiehall estate. It still remains, nearly perfect, in the high bank on the side of the road, the end of the cist only having been removed, and the covering slab left in its place. It contained bones and ashes, without any urn. In Mr. J. Walker Ord's "History and Antiquities of Cleveland," an interesting account is given of the opening of some tumuli on Bernaldby Moor, in 1843, in one of which—a bell-shaped barrow—was found a remarkably fine cinerary urn sixteen and a half inches high, covered with an unhewn slab carved with rude devices similar in style to those described above. Of the same class also is another slab figured here, the drawing of which was made by George

Annan Street Stone.

Scott, the friend of Mungo Park, who accompanied him to Africa and died there. It was forwarded to the Society of Antiquaries of Scotland by Sir Walter Scott, in 1828, who described the original as a rough sandstone, about six feet long by perhaps two and a half broad, which was raised by the plough at a place called Annan Street, upon the farm of Wheathope. The drawing is designated, probably by the original draftsman, "a Druid stone found at Annan Street, figured with the sun and moon." Little doubt can be entertained that it had formed the cover of a cist, though few probably will now be inclined to attempt a solution of the enigmatic devices rudely traced on its surface. The spot where it was found is about half a mile from the church of Yarrow, and close by there are two large stones, about 120 yards apart, which are believed to mark the scene of the memorable struggle that has given "The dowie houms of Yarrow" so touching

a place in the beautiful legendary poetry of Scotland. Thus does the human mind delight to give a local habitation to the mythic and traditional characters and incidents that take hold on the fancy, whether it be the old mythological smith Wayland, associated with the cromlech of Berkshire; the fabulous King Coil, and the sepulchral barrow of Ayrshire; or The Flower of Yarrow, the creation of some nameless Scottish minstrel, whose pathetic ballad will live as long as our language endures.

The rude attempts at sculpture figured here are certainly as artless, and to us as meaningless, as the chance traces of wind and tide on the deserted sea-beach. Doubtless they had a meaning and an object once, and were not produced without the expenditure both of time and labour by the primitive artist, provided almost for the first time with metallic tools. To us they are simply of value as probably indicating the infantile efforts of the old British sculptor, and the rudiments of the art to which we owe such gorgeous piles as the Cathedral of Salisbury, and such sculptures as those of Wells and York. Even as the parent delights to trace in the prattle of his child the promises of future years, the archæologist may be pardoned if he is sometimes tempted to linger too fondly on those infantile efforts of the human race until he sees in them the germ of future arts, the first attempts at symbolic prefigurements, and the rudiments of those representative signs from which have sprung letters and all that followed in their train.

The most interesting and characteristic features, however, which the tombs of the Bronze Period disclose, are the weapons and implements deposited alongside of the deceased, or inclosed with his ashes in the cinerary urn. Much variety is traceable in the design as well as in the mode of disposing of these enduring tokens of reverence and affection. But we have already examined them with sufficient minuteness, and have found a distinctive uniformity traceable throughout the whole; marking with no doubtful features the products of an epoch in which we discern the germ of all future progress, and the dawn of that civilisation the full development of which we are now privileged to enjoy.

CHAPTER VIII.

RELIGION, ARTS, AND DOMESTIC HABITS.

The title of this chapter, as of some others of those relating to British history prior to the first century of the Christian era, may perhaps appear to readers of indices as not a little presumptuous. These chapters deal exclusively with a period believed to have long preceded written history, and of which we possess no other records than those that have been garnered in the grave, wherein is "no knowledge," or chance-found amid the alluvium and peat-mosses, in which the geologist discerns many evidences of antiquity, but from which he has yet failed to deduce any defined measure that will help us to their age. Still we have found, in the ruder productions of the primitive period, that the simplest works of man bear some ineffaceable traces of his intelligence. The sagacious inductions of Cuvier have met with universal acceptation in their definition of the form, the size, the food, and the general haunts and habits of the Megalonyx, a gigantic antediluvian sloth, only a few disjointed bones of which are known to exist. We need not therefore despair of learning somewhat of the early Caledonian, of his habits, his thoughts, and even of his faith, when we are able to refer to so many specimens of his handiwork and inventive design, and retain some relics of his ruined temples, and abundant illustrations of his sepulchral rites. It is by simple induction, however, that the discovery of such truths is aimed at. Intentionally, at least, no rein is given here to fanciful speculation, nor are any theories advanced but such as are believed to be based on the suggestive aspects of ascertained truths.

We have no reason to assume that the aboriginal Caledonian of the

Bronze Period ever carried civilisation so far as materially to affect the social character of the community. The patriarchal system of tribes or clans, we may presume, continued nearly as we know them to have existed at the first dawn of written history, or, at most, were only modified by the union of a greater or less number of petty tribes under some general chief. Many improvements on the accommodation and conveniencies of the native hut and its furnishings would necessarily result from the possession of metallic tools. With these only could the art of the carpenter be developed, and the implements of husbandry and the chase, as well as the weapons of war, be moulded into useful and convenient forms. The clothing also, we have seen, was aided by the ingenuity and skill of feminine arts. The skins of the deer or the wild bull, as well as of the fox, the hare, and the smaller fur-clad animals, would thus be superseded in part, and fashioned, where they were retained, with such improved taste as made them correspond to the beautiful ornaments of the period. Of very much of this all evidence has disappeared, but enough remains to prove that the Caledonian of the Bronze Period was no naked painted savage. Whether the ingenious knitters of the garments, the precious fragments of which have occasionally been rescued from the tumuli, had learned to adorn them with any interwoven parti-colours may be doubted; but the learned Scottish antiquary, Dr. Jamieson, has already suggested the Gaelic *breac*, signifying parti-coloured, and *breacan*, a tartan plaid, as perhaps the true source of derivation of the name *Gallia Braccata*, which would thus refer to the colour rather than to the fashion of the Celtic dress. We know certainly, from the sculptures on Trajan's column, that the *Bracæ* were not so unfamiliar to the Romans as to be adopted as the peculiar characteristic of a single race. It is to be borne in remembrance, however, that in so far as this archæological period is strictly defined to include only the era of Archaic art, and the working in gold, copper, and bronze, prior to the knowledge or economic use of iron, it must be assigned to an epoch which had drawn to a close before the Britons were known to the Romans, unless by vague traditions indirectly acquired through Carthage or Spain, or by the imperfect notices of the Cassiterides to be found in the pages of early Greek writers.

An interesting inquiry suggests itself in relation to this as to all unknown states of society—What was the social position of woman? To this the answer we can at present give is very uncertain. But the

traces already noted are not such as to discourage all hope of attaining to greater definiteness and certainty. The frequent occurrence of what appear to be female personal ornaments among the contents of the Scottish tumuli, seems to afford satisfactory indications that woman possessed, at that early era, somewhat of the equality of social position which still peculiarly characterizes the races of Northern Europe. Further investigations can hardly fail to add more certainty to our deductions, while they may also greatly enlarge the evidence on which they are based. For the rest, we infer with more certainty that the dog was the chosen companion of man in these old days, as he is still; for the bones of the buried favourite have been frequently found laid beside his master's urn. Doubtless his value in the chase was well known, and his fidelity fully recognised at the hearth. Whether the horse had also become, thus early, man's useful companion and servant, appears still open to further inquiry. Probably not till the succeeding era had fairly brought its civilizing influences into full operation, did the Briton establish his dominion over the noble and intelligent quadruped which assumed so important a place in the symbolism and mythology of his latest Pagan creed; though the investigations of the geologist leave no room to question its presence prior to, if not contemporarily with the earliest colonists of the British Isles. From diverse points, and by various means, we thus seek to catch a glimpse of those old historic eras. But, with all such aids, our view must be owned to be sufficiently slight, and our outline to stand in need of much filling in, before we can picture as we would wish to do, the intelligent Briton of that old time when he was still, perhaps, a barbarian, but had ceased to be a savage, and is therefore the just object of our earnest sympathy as the originator of much the beneficent results of which we even now inherit.

This first era of civilisation, which succeeded the introduction of metals and is known as the Bronze or Archaic Period, manifestly differs, in many essential points, from that primeval period previously considered. It is the birth-time of native arts wherein we discern the possibility of still better things. There pertains to it an interest altogether peculiar. Its acquired knowledge probably long exceeded its means. Copper and bronze could at no time be so plentifully supplied as to admit of the facilities to which the abundance and cheapness of iron have for so many centuries accustomed us. With a thorough knowledge of the superiority of metals, the ingenious artificer

was compelled, throughout the whole Bronze Period, to manufacture nearly all his bulkier implements of stone. Still he was being educated, so that when the greater facilities did come within his reach, he was able to avail himself of them. We must look, indeed, upon this whole period, as upon the early years of an intelligent child—rich with the freshness, the originality, and the unconscious simplicity of youth. Its efforts are extremely unequal, blending the most Archaic works with occasional productions rivalling the ingenuity and taste of the polished eras which have succeeded. We detect, moreover, the evidences of a social state wherein the value of combined operations had still to be learned, and where isolation led to abundant manifestations of ingenuity and skill, without producing any immediate results beyond the little sphere of the native hut, or hamlet, or patriarchal clanship. We discover, indeed, nothing inconsistent with such a social and political state as we know to have pertained among the most civilized British tribes in the century immediately preceding the Christian era, when, for the first time, we are able to look upon them with the aid of definite, though somewhat prejudiced and disparaging narratives of classic historians. I would only add, that there appears no shadow of evidence thus far discoverable, on which to found a single doubt as to the indigenous character of British relics of the Primeval and Archaic Periods. As to the favourite idea of their Danish origin, it is altogether absurd and irreconcilable with known facts. Nothing is more certainly established in the history of these northern races, and, indeed, involved in the nature of things, than that, long before the Scandinavian races emerged from the *viks* and *fiords* of the north, the Archaic Periods both of Scandinavian and British arts had been superseded by others more compatible with the social status which such aggressive movements very manifestly indicate.

The term *Archaic* has been adopted as a definition of this era, because, in the sense which is now most generally attached to it, it peculiarly applies to the artistic productions of the period. The ornamentation is almost without exception only improvements on the accidents of manufacture. The incised decorations of the pottery appear, in many cases, to have been produced simply by passing twisted cords round the soft clay. More complicated designs, most frequently consisting of chevron, saltire, or herring-bone patterns, where they are not merely the primary results of a combination of such lines, have been suggested, as I conceive, by the few and half-

accidental patterns of the industrious female knitter. In no single case is any attempt made at the imitation of a leaf or flower, of animals, or any other simple natural objects. It is curious, indeed, and noteworthy, to find how entirely every trace of imitative art is absent in the British Archaic relics, for it is by no means an invariable characteristic of the primitive arts of Allophylian nations. The objects recovered from the sepulchral mounds of the Great Valley of the Mississippi, as well as in the regions of Mexico and Yucatan, display, along with the weapons and implements of stone, silex, and obsidian, numerous indications of imitative design. Among the relics of the aboriginal mound-builders of the Great Valley especially, pipe-heads, tubes, masks, and a great variety of nondescript articles, are often characterized by evidences of very considerable ingenuity and imitative skill. Even the pottery is occasionally moulded into the forms of animals, and when only decorated with lines these are very frequently arranged in such definite or flowing patterns as suggest their derivation from flowers and other objects in nature.[1] The natives of the Polynesian Islands display a similar though perhaps inferior taste in their clubs, paddles, and mallets, the prows of their boats, and numerous other objects, carving them into grotesque imitations of human and other animal forms.

The indefinite and Archaic character which marks the ornamentation of the early British pottery, characterizes the most elaborate and costly ornaments of gold. Though the peculiar form of one class of gold ornaments found in the British Isles has suggested a name for it derived from the calix of a flower, which the cups of its rings seem in some degree to resemble, yet no example has been found bearing the slightest traces of ornament suggestive of such similarity having been detected by the old British goldsmith. Where incised lines are superinduced upon the flower-like forms, they are the old chevron and saltire patterns of the rude clay pottery, though executed with considerable delicacy and taste. It is obvious that ideas of comparison, which enter so largely into the spirit of modern artistic design, and also form so considerable an element in the more artificial poetic compositions of modern bards, were altogether undeveloped in these old times. Art was, in fact, the child of necessity, and continued to receive the adjuncts of adornment from the same sources from whence it had first derived its convenient but arbitrary forms.

[1] Smithsonian Contributions to Knowledge, vol. i. pp. 193, 194, 244-271, &c.

The gold "sceptre head" found at Cairnmure in Peeblesshire, and engraved on a former page, is one of the very few examples of defined forms of ornamentation found along with objects some of which at least may admit of being classed with those belonging to this period. They are still arbitrary, and, strictly speaking, not imitative, though they approach towards forms directly imitative, or at least designed to be representative, with which we shall become familiar in the succeeding era. Little doubt, however, can be entertained that the sceptre head belongs to the succeeding era. The funicular torc was undoubtedly in use in the latest Pagan period, and the whole Cairnmure hoard may very consistently be assigned to it. The large ornaments on the sceptre head, though very partially defined, resemble in some degree the "snake-pattern," which forms one of the commonest deco-

Gold Rod, Circle of Leys.

rations of the last Pagan era. The woodcut exhibits a much more characteristic primitive symbol of office. It is the gold lituus dug up in the year 1824, within the monolithic circle of Leys, Inverness-shire. The parts united together form a rod nearly eighteen inches long, the rude workmanship of which strikingly contrasts with the delicate though imperfectly defined ornamentation of the Cairnmure sceptre head.[1] This entire absence of imitation in the primitive British arts is an important fact in its bearing on our present inquiries, seeing that it is not a universal or even a very general characteristic of Allophylian nations. The relics, as we have seen, recovered from the sepulchral mounds of the Great Valley of the Mississippi, as well as in the regions of Mexico and Yucatan, display numerous indications of imitative skill. The same is observable in the arts of various tribes of Africa, Polynesia, and of other modern races in an equally primitive state. What is to be specially noted in connexion with this is, that both in the ancient and modern examples, the imitative arts accompany the existence

[1] After making vain inquiries about this very remarkable relic, I have been fortunate enough, since the previous notice (*ante*, p. 114) was printed, to recover a drawing of it from a cast taken from the original, and now in the possession of J. Anderson, Esq., W.S., of Inverness. The shorter pieces appear to have formed the two extremities.

of idols, and the abundant evidences of an idolatrous worship. So far as we yet know the converse holds true in relation to the primitive British races, and as a marked importance is justly attached to the contrasting creeds and modes of worship and polity of the Allophylian and Arian nations, I venture to throw out this suggestion as not unworthy of further consideration.[1] Yet we are not entirely dependent on negative evidence in relation to the primitive creed. We are led to the conclusion that the ancient Briton lived in the belief of a future state, and of some doctrine of probation and of final retribution, from the constant deposition beside the dead, not only of weapons, implements, and personal ornaments, but also of vessels which may be presumed to have contained food and drink. That his ideas of a future state bore little resemblance to "the life and immortality brought to light by the Gospel," is abundantly manifest from the same evidence. Somewhat, however, is added to our knowledge of his religion, if the inference be admitted to be a legitimate one which deduces from the absence of all imitation of natural objects in his ornamental designs, the conclusion that idolatry has pertained under no form to the worship of the native Briton. Whether his religion was a fetish-worship, with spells and strange magical rites; or that he brought from his far eastern birth-land the Chaldean star-worship or the Persian fire-worship; or knelt to Sylvanus and the *Campestres Æterni Britanniæ*,—the supposed haunters of his native fields and forests, to whom the Roman legions afterwards reared altars and poured out libations,—it seems consistent with all analogy to conclude that no visible forms were worshipped within the Caledonian groves or monolithic temples. Julius Cæsar, in his oft-quoted account of the Druids, describes the Gauls as much addicted to religious observances, and names Mars, Apollo, Jupiter, Minerva, and Mercury, as objects of their worship. Of Mercury especially, he adds, they have many images, and they esteem him as the inventor of the arts. This, however, might be true enough of the continental Gauls of that late period, who had then long been partially brought into contact with the Romans, and yet be totally inapplicable to the Caledonians, who had no direct knowledge of them for fully a century after the date of

[1] The views here advanced were submitted to the Ethnological Section of the British Association for the Advancement of Science, at its meeting at Edinburgh, in 1850, along with those on the crania of the tumuli, in a communication entitled "An Inquiry into the Evidence of the Existence of Primitive Races in Scotland prior to the Celtæ."

Cæsar's first landing on the white cliffs of England. As to the theories relating to Celtic Druidism, concerning which so much has been written, an opinion has already been expressed. It is one of the many branches of primitive history, in which, after having perused all the ponderous tomes which have been devoted to its elucidation, the archæologist returns with renewed satisfaction to the trustworthy though imperfect and scanty records which he finds in the relics of primitive invention and archaic design. The truths contained in these ample dissertations are mostly too few and uncertain to be worth the labour of sifting them from the heap in which they may be buried, at the rate of about a grain of truth to a bushel of fancy. Still, from the authentic allusions of classic writers, we may safely conclude thus far, that a native priesthood exercised a most important influence over the later Celtic and Teutonic races of Britain, as appears to have been the case among most of the nations of the Indo-European family.

In the present state of archæological inquiry, it would be presumptuous to assign dogmatically the precise races to which the arts of each period pertain. Still the indications both of archæological and direct historical evidence manifestly point to the Celtæ as comparatively late intruders, and leave us to seek, with little hesitation, in their Allophylian precursors for the metallurgists of the Archaic Period. In the Kumbe-kephalic Allophyliæ, we may expect to trace the rude primeval workers in stone, with undefined sepulchral rites, and no distinct evidences of a faith or hope beyond the grave. Upon this meanly gifted race the Brachy-kephalic Allophyliæ intruded, bringing with them, in all probability, the knowledge of metallurgic arts, yet effecting their aggressions by such slow degrees that, as we have seen, their arts appear to have reached our northern regions long before the rude aborigines were called upon to employ them in repelling their originators. From these as well as other arguments we infer, that when the earliest Celtic nomades first reached our coasts, they found the older natives already in possession of weapons of bronze, and familiar with the most essential processes of the metallurgist. Whether the Celtæ had acquired any knowledge of iron at the period of their arrival in Europe must have depended to a great extent on the nature of their previous intercourse with the civilized nations of Central Asia; but the smelting of the iron ore and the working of the metal to any great extent, are manifestly altogether incompatible with the

condition of a nomade people, migrating across a continent the partial clearings of which were already occupied by hostile races. Some reference has been made in a former chapter to evidence which an investigation of the languages of the Indo-European nations furnishes as to the degree of progress to which they had attained at the period of their dispersion. It would lead us to infer that they were either entirely ignorant of the use of the metals, or had lost this useful knowledge amid the exigencies and privations of their nomade life. In so far, therefore, this important source of ethnological evidence involves nothing essentially inconsistent with the idea of the metallurgic arts being introduced in Britain for the first time among a Celtic population already established on the soil. The earliest knowledge, however, which we acquire of the continental Celtæ exhibits them as skilled workers in metals, and even the Romans appear to have acquired their principal supplies of iron and the art of converting it into steel, from the Norici, a Celtic race who occupied a considerable tract of country south of the Danube. Whatever was the precise state to which this race had sunk at the period of its earliest pioneers intruding on the Allophylian nations of Europe, the supremacy acquired by them is sufficient evidence of their innate superiority. Possessed originally of good mental capacity, so soon as the successive wandering hordes of the Indo-European stock formed permanent locations, it is to be presumed that evidences of their powers would be manifested; but even in their nomade state they bore with them some of the elements by which the Arian tribes are held to be distinguishable from the older Allophylian nations.

"They had bards or scalds, *vates*, *ἀοιδοί*, who were supposed under a divine influence to celebrate the history of ancient times, and connect them with revelations of the future, and with a refined and metaphysical system of dogmas, which were handed down from age to age, and from one tribe to another, as the primeval creed and possession of the enlightened race. Among them, in the West as well as in the East, the doctrine of metempsychosis held a conspicuous place, implying belief in an after state of rewards and punishments, and a moral government of the world. With it was connected the notion that the material universe had undergone and was destined to undergo a repetition of catastrophes by fire and water; and after each destruction to be renewed in fresh beauty, when a golden age was again to commence, destined in a fated time to corruption and decay. The emanation of all beings from the soul of the universe, and their refusion in it, which were tenets closely connected with this system of dogmas, border on a species of Pantheism, and are liable to all the difficulties attendant upon that doctrine.

"Among most of the Indo-European nations the conservation of religious dogmas,

patriarchal tradition, and national poetry, was confided not to accidental reminiscences and popular recitations, but to a distinct order of persons, who were venerated as mediators between the invisible powers and their fellow-mortals, as the depositaries of sacred lore, and interpreters of the will of the gods expressed of old to the first man, and handed down orally in divine poems, or preserved in a sacred literature known only to the initiated. In most instances they were an hereditary caste, Druids, Brahmans, or Magi. Among the Allophylian nations, on the other hand, a rude and sensual superstition prevailed, which ascribed life and mysterious powers to the inanimate objects."[1]

The contrasting religion of fetisses and spells, ascribed to the Allophylian nations, has already been referred to. It still exists among the Finns and Lappes of the north of Europe, and the Vogules, Ostiakes, and Esquimaux, occupying the northern regions of Asia and America, whither we may naturally conclude they have been driven by the intrusion of the superior races. To these, perhaps, we must look for the living type of the primeval Briton, and to their rude superstitions for some shadowy tradition of the creed by which his untutored mind took hold of the unseen. How much of the refined system of metaphysical dogmas ascribed by Dr. Prichard as a general characteristic of the Arian nations, pertained to those of them that colonized Britain, we can only partially surmise. We know, however, that at the period when the annals of our island are first embraced within the limits of authentic written history, a native priesthood existed, combining not only the sacerdotal and judicial characters, so frequently found united in the priesthood of even comparatively civilized races, but also such influence as leaders and chiefs that the Romans found in them their most implacable and unrelenting foes. Hence their religious rites were early proscribed by the imperial lieutenants; and the Druid priest, who held fast by his mysterious faith and passionate love of national independence, fell back before the advancing legions of Rome, till he found partial and temporary repose within the ancient groves of the Caledonian Celt, beyond the Tyne and Solway. The traces of this, however, are extremely indistinct and uncertain; and so little evidence does Celtic tradition preserve of the distinction between the refined pantheistic creed of the Arian races, and the spells and superstitions of Allophylian aborigines, that the name of Druid, or *Druidheadh*, is used only by the modern Gael as significant of a magician or wizard. Before, however, the hereditary British priesthood had been

[1] Prichard's Natural History of Man, p. 187.

driven into the northern fastnesses of the island, if not, indeed, before his race had effected a landing on its shores, the proofs which we possess seem clearly to manifest that the Archaic Period of native art had come to an end, and the last great change within the Pagan era, resulting from the introduction of the more abundant and more useful metal, iron, had begun to operate. Within that closing primitive era we arrive at the first glimpses of authentic records. Thus much has, meanwhile, proved to be recoverable, in the form of suggestive inferences, if not of ascertained truths, from amid the dim shadows that have for ages covered, as with the pall of oblivion, the history of our national infancy, and of its first youth.

PART III.

THE TEUTONIC OR IRON PERIOD.

CHAPTER I.—THE INTRODUCTION OF IRON.

THE changes consequent on the introduction of Iron, to a people already familiar with the smelting of tin and copper ores and the fabrication of weapons and implements of bronze, were not necessarily of a radical character, and undoubtedly were first experienced in the gradual acquirement of the new metal from foreign sources. Had bronze been obtainable in sufficient quantities to admit of its application to the numerous purposes for which iron has since been used, there was nothing to prevent the accomplishment of nearly all to which European civilisation has since attained, without the knowledge of the new metal. The opposite, however, was the case. The metal was costly and scarce, and hence one of the most obvious sources of the lengthened period over which we have seen reason to believe that the Archaic era extended. Throughout that whole period metal in every form was a rare and valued luxury, and it was as such that iron, the most widely diffused, the most abundant and most useful of all the metals, was first introduced into the British Isles. This is sufficiently accounted for from the fact, that iron rarely, if ever, occurs in nature in a metallic state; and that it requires great labour and a most intense heat to fuse it.

The age of iron was introduced by a transition-period, occupying possibly as long a time as that which marked the gradual introduction of the era of bronze; but it was not characterized by results of the same direct value. So long as the knowledge of the new metal merely extended to the substitution, by barter or other means, of iron for bronze weapons or implements, its influence could be little more noteworthy than may be the substitution of percussion-caps for flints in our British standing army, to some archæologist or historian of the year 1950. But even such traffic, no doubt, tended through time to make metals more abundant, and metallic weapons and implements more readily attainable, so that the artisan and fabricator were at length enabled to dispense entirely with the primeval stone-hammer and hatchet, and greatly to extend the application of the new and useful material.

It was only when iron had become thus plentiful that it could be productive of any effective change on the characteristics of the races by whom it was used. But though iron is the most abundant of all the metals, and was the latest to be introduced into use, it is at the same time the most perishable, rapidly oxidizing, unless preserved by the most favourable circumstances. Accordingly, very few iron relics, properly pertaining to the closing Pagan era, have been found in such a state of preservation as to enable us to make the use of them, in judging of the skill of their fabricators, which has already been done with those of the Bronze Period. The new and more useful metal, however, did not supersede the gold and bronze in their application to purposes of personal adornment; neither did it put a stop to the manufacture of pottery, to the use of bronze in the construction of vessels for sacred or domestic purposes, nor to those sepulchral rites by which so many evidences of primitive arts and manners have been chronicled for our instruction. It rather increased all these, superadding the additional material of silver, wherewith to multiply the personal ornaments which extending civilisation and refinement more largely demanded. The superior fitness of the new metal for the construction of weapons of war would, no doubt, be first discovered and turned to account. The absence of the guard on all the swords of the Bronze Period, to which attention has been directed, no doubt originated mainly in the mode of using the weapon, which its own capabilities rendered indispensable. The fence and clash of weapons consequent on modern swordsmanship, in which the sword

is made to supply both offensive and defensive arms, was altogether incompatible with weapons of cast bronze, liable to shiver like glass at a violent blow. Experience would soon teach the old swordsman the true use of his weapon; and so long as he had only to contend with neighbouring tribes equally armed, he would deem his graceful leaf-shaped sword and his massy spear of bronze the perfect models of a warrior's arms. But while the changes which we have aimed at tracing out in the previous section were progressing slowly but effectively within our sea-girt isle, very remarkable occurrences were affecting the continent of Europe, and extending their influences towards its remotest limits. Carthage had risen from a Tyrian colony, planted on the site of an older Phœnician settlement on the African coast, to be one of the chief commercial and maritime states of the world. The younger builders on the banks of the Tiber had founded the capital destined twice to form the centre of universal empire. Rome and Carthage had come into collision, as was inevitable, according to the notions of these elder times, which held it impossible that two ambitious republics should exist as neighbours. The Punic wars followed, and for upwards of a century—till 147 B.C. when the African capital was razed to the ground—the seat of war was far removed from the British Isles. The second Punic war carried the arms of the rival republics into Spain, and then possibly some faint rumour of it may have reached the Cassiterides, stimulating for a time the trade of their ports, and checking it again, as disasters thickened around the devoted African kingdom. Spain still continued the seat of war after the total annihilation of the Carthaginian power; and during the intestine struggles which followed in the Jugurthan war, there appeared for the first time on the northern frontiers of Italy, hosts of the Teutones, Cimbri, and other northern barbarians. By these several Roman armies were defeated, and the growing power threatened with annihilation from this unexpected source, at the very time when it seemed to be without a rival. From an incidental notice of Polybius we learn the important fact that these northern tribes were already familiar with iron, and possessed of weapons of that metal, though apparently ignorant of the art of converting it into steel. One of the earliest European sources of iron, of which we know anything definite, was the country of the Norici, a tribe occupying a considerable region to the south of the Danube, the exact boundaries of which are only imperfectly known. The invention of

the art of converting iron into steel is ascribed to this Celtic race. Noricum was conquered by Augustus, and, in his time, the Noric swords were as celebrated at Rome as the Damascus blades or Andrea Ferraras in more recent times. To this source, therefore, we should probably look for the earliest supplies of iron weapons. Polybius also refers to the country of the Norici as abounding in gold; so that they appear to have excelled in all the metallurgic arts, and may be supposed to have supplied the arms with which the Teutones and the Cimbri invaded the Roman frontiers. The latter, indeed, advanced through Noricum, and bore perhaps from thence the sword which the haughty Gaul flung into the balance of the Capitol when Quintus Sulpicius purchased the safety of Rome, not with iron but gold.

The argument deduced from the apparently independent origin of the oldest European names of the metals, confirms the evidence derived from other sources in proof of the ignorance of the Arian nomades of the working of metals on their first settlement in Europe. The same line of argument, however, adds strong confirmation to the conclusion suggested here, that the Celtæ had obtained considerable mastery of the metallurgic arts at the time when they were brought into direct intercourse and collision with the growing power of Rome, and renders it probable that the Romans derived both the names of some at least of the metals, and their knowledge of their economic uses from this older race. The Saxon *gold* differs not more essentially from the Greek χρυσος, than that from the Latin *aurum;* or iron, from σιδηρος, or *ferrum;* but when we come to examine the Celtic names of the metals it is otherwise. The Celtic terms are:—Gold —Gael. *or;* golden, *orail;* Welsh, *aur;* Lat. *aurum.* Silver—Gael. *airgiod;* made of silver, *airgiodach;* Welsh, *ariant;* Lat. *argentum,* derived in the Celtic from *arg,* white or milk, like the Greek αργος, whence they also formed their αργυρος. Nor is it improbable that the Latin *ferrum* and the English *iron* spring indirectly from the same Celtic root:—Gael. *iarunn;* Welsh, *haiarn;* Sax. *iren;* Dan. *iern;* Span. *hierro,* which last furnishes no remote approximation to *ferrum.* Nor with the older metals is it greatly different: as bronze—Gael. *umha* or *prais;* Welsh, *pres,* whence our English *brass*—a name bearing no very indistinct resemblance to the Roman *æs.* Lead in like manner has its peculiar Gaelic name, *luaidhe,* like the Saxon *læd,* while the Welsh, *plwm,* closely approximates to the Latin, *plumbum.*

It may undoubtedly be argued that the Latin is the root instead of the offshoot of these Celtic names, but the entire archæological proofs are opposed to this idea; and the direct historic evidence of the early Noric arts, and of the arms of the barbarian invaders of Italy who dictated terms to Quintus Sulpicius in the Roman Capitol, prove that the Celtic and Teutonic races of the north of Europe preceded the Romans in their mastery of the art of working in metals. To this period, (circa B.C. 113-100,) or probably a little earlier, while Rome was preoccupied with the struggle for existence, we may refer the close of the isolated state of the British Isles, and the irruption of newer races among the original occupants of the country. This it is, and not the mere alteration of the old metallurgist's materials, which gives a totally new character to the Iron Period. The gold and the bronze are still there, but the shapes which express to us the intellectual progress of their artificers and owners are essentially changed. The indefiniteness of archaic art gives place to forms and ornaments as positive and characteristic as any in which we recognise the expressive types of medieval art, or the changing fashions of the Elizabethan and Louis Quatorze styles. It is important that we should fix as nearly as possible the true date of this change, when for the first time we find our inquiries bringing us in contact with ascertained epochs and recorded facts. From this, as from a central point, we may perhaps yet be able to reckon backward as well as forward, and at least secure a basis for future observations.

When iron first became known to the native Britons its value was naturally estimated in accordance with its rarity, and it was applied to such uses as we now devote the precious metals. Converted into personal ornaments, it formed rare, if not beautiful trinkets, and in the shape of ring-money it even superseded or supplemented the older gold. Julius Cæsar speaks of the Britons as using such a rude currency; but we may infer from other evidence already referred to that this did not arise, at that comparatively late period, from its extreme rarity. Herodian indeed speaks still later of the Britons wearing "iron about their bellies and necks, which they esteem as fine and rich an ornament as others do gold." But we have abundant evidence that they were familiar with the value and beauty of gold, and we shall not, I think, overstrain the allowances to be made for the prejudiced accounts of the most intelligent Roman, in receiving even the narrative of Cæsar with some limitations. His personal oppor-

tunities of observation could extend only to a very limited section of the native Britons, and these seen under the most disadvantageous circumstances; while the polished and haughty Roman was little likely to trouble himself with attempting any very impartial estimate of what were in his eyes only different phases of barbarism.

The fact has already been adverted to, that all the descriptions of the weapons of the Gauls furnished by classic writers, lead us to the conclusion that the ancient bronze leaf-shaped sword had been entirely superseded by the more effective iron weapon prior to their collision with the veteran legions of Rome. The same is no less true of the contemporary Britons. Tacitus describes the Caledonians as "a strong, warlike nation, using large swords without a point, and targets, wherewith they artfully defended themselves against the Roman missiles." We know, moreover, that before the Romans effected a landing in Britain, they were familiar with the fact of an intimate intercourse having been long maintained with Gaul. The former is described by Julius Cæsar as the chief seat of a religion common to both; and the evidence is no less explicit which shews that many of the southern British tribes were of the same race, and differed little in arts or customs from the Gauls of the neighbouring continent. But still more, the reason assigned by Cæsar for the first invasion of Britain was the provocation its natives had given him by the aid which they furnished to his enemies in Gaul. There could not therefore exist any great disparity in their arts or military accoutrements; while we discover in this no slight evidence of the maritime skill to which they must have attained even at that early period, to enable them to embark such bodies of auxiliaries for the help of the continental tribes as attracted the notice and excited the indignation of the Roman general.

To the early part of this Age of Iron should most probably be assigned the construction of the vast monolithic temple of Stonehenge. Its difference from the older temples of Avebury and Stennis, as well as from all other British monuments of this class, has already been referred to. Rude and amorphous as its vast monoliths are, they are characterized by such a degree of regularity and uniformity of design, as marks them to belong to a different era from the Avebury or the Stennis circle, when the temple-builders had acquired the mastery of tools with which to hew them into shape. Much greater mechanical skill, moreover, was required to raise the superincumbent masses

and fit them into their exact position, than to rear the rude standing stone, or upheave the capstone of the cromlech on to the upright trilith. Stonehenge, therefore, is certainly not a work of the Stone Period, and probably not of the Bronze Period, with the exception of its little central circle of unhewn stones, which may date back to a very remote era, and have formed the nucleus round which the veneration of a later and more civilized age reared the gigantic columns, still so magnificent and so mysterious even in ruin.

The isolation which we have reason to believe had hitherto exercised so much influence on the native tribes of Britain, is now seen to be finally at an end. The Celtic races are once more nomade, or mingling their blood with the more civilized tribes which are gradually securing a footing in the south-eastern portions of the island. The first stream of Teutonic colonization had set in, which, followed successively by the Romans with their legions of foreign auxiliaries, by Saxons, Angles, Scoti, Norwegians, Danes, and Normans, produced the modern hardy race of Britons. The term Teutonic has been adopted here as at once the most comprehensive and definite one by which to characterize this period. In Scotland the Celtic races maintained a progressive civilisation which ultimately developed itself in new forms, producing an essentially Celtic style and era of art at a later period; but throughout the last Pagan era, the arts of the Celtic Caledonians appear to have been modified by the same Teutonic influence as those of South Britain, Gaul, Germany, and Scandinavia. The tribes of North Britain were indeed only indirectly affected by the aggressive movements of the earlier Teutonic invaders, and were probably a pure Celtic race when the Roman legions penetrated into the Caledonian fastnesses in the second century of our era. But the close affinity between the relics of North and South Britain abundantly proves the rapid influence resulting alike from the friendly interchange of useful commodities and personal ornaments, and doubtless also from the frequent spoils of war. The beautiful coinage of the British Prince Cunobeline, (circa A.C. 13 to A.D. 41;) and supposed to be the work of a Roman, or of a native monier familiar with Roman art, exhibits the type which the Gauls imitated from the Didrachmas and Staters of Macedonia upwards of three centuries before. Little doubt is now entertained by our best numismatists that the coins of Comius and others of an earlier date than Cunobeline or the first Roman invasion, include native British mintage. There is no question,

at any rate, that they circulated as freely in Britain as in Gaul, and have been found in considerable quantities in many parts of the island. The iron or bronze and copper ring-money of the first century must therefore be presumed as only analogous to our modern copper coinage, and not as the sole barbarous substitute for a minted circulating medium.

Several interesting discoveries of the primitive iron ring-money have been made in Scotland, though in no case as yet in such a state as to admit of its preservation. In a minute description of various antiquities in the parish of Kilpatrick-Fleming, Dumfriesshire, superadded to the Old Statistical Account, the contents of several tumuli opened about the year 1792 are detailed. In one was discovered a cist, inclosing an urn of elegant workmanship, filled with ashes. The urn was found standing with its mouth up, and covered with a stone. At a small distance from it, within the cist, lay several iron rings, each about the circumference of a half-crown piece, but so much corroded with rust that they crumbled to pieces on being touched.[1] A similar discovery made in Annandale is thus described by an eyewitness: "In the centre of the tumulus was found a red flag-stone laid level on the earth, on which were placed two other slabs of equal size, parallel to each other; and other two, one at each end; another was laid on the top as a cover. In the interior of this was an urn containing ashes, with a few very thin plates of iron in the form of rings, so completely corroded that when exposed to the air they crumbled into dust."[2] In these frail relics of the new material we can have little hesitation in recognising the *annuli ferrei* of Julius Cæsar, used by the Britons of the first century as their accredited native currency.

Assuming it as an established fact that the native Britons of the southern parts of the island, at least, had carried the arts of civilisation so far as to coin their own money, we perceive therein the evidence of a totally different era from the Archaic Period, in which direct imitation of the simplest positive forms is hardly traceable. Bronze, as has been already observed, continued to be used no less than in the former era, of which it has been assumed as the characteristic feature, in the manufacture of personal ornaments, domestic utensils, &c. In Denmark, indeed, some remarkably interesting relics have been found, seemingly belonging to the very dawn of the last transition-period, when iron was more precious than copper or bronze.

[1] Sinclair's Statist. Acc. vol. xiii. p. 272.

[2] New Statist. Acc. vol. iv. p. 97.

These include axes consisting of a broad blade of copper edged with iron, and bronze daggers similarly furnished with edges of the harder metal. Even in Denmark such examples are extremely rare, and no corresponding instance that I am aware of has yet been discovered in Britain. A great similarity is traceable between the bronze relics of the various northern races of Europe, belonging to the Iron age, and that not of an indefinite character, like the stone hammer or flint lance and arrow-heads of the Primeval Period, but a distinct uniformity of design and ornament, which has mainly contributed to confirm the prevalent opinion that the majority of British and especially of Scottish bronze relics are of Danish origin. In examining these relics in detail, I shall endeavour honestly to assign to Scandinavia whatever is her own, but if the arguments advanced here have any foundation in truth, it is obvious that the British Iron age had lasted well-nigh a thousand years, and as a Pagan era was at an end before we have any historical evidence of Scandinavian invaders effecting permanent settlements on our shores. The whole evidence of history manifestly leads to the conclusion that Britain long preceded the Scandinavian races in civilisation, nor was it till she had been enervated alike by Roman luxury and by the succeeding intestine jealousies and rivalries of native tribes, that Scandinavia, fresh in her young barbarian vigour, made of her a spoil and a prey.

On none of the native arts did Roman intercourse effect a more remarkable change than on British fictile ware. From the English Channel to the Frith of Tay, Roman and Anglo-Roman pottery have been met with in abundance, including the fine Samian ware, probably of foreign workmanship, the rude vessels of the smother kiln, and the common clay urns and coarse amphoræ and mortaria, designed for daily domestic use. Numerous Anglo-Roman kilns have been discovered, some of them even with the half-formed and partially baked vessels still standing on the form or disposed in the kiln, as they had been abandoned some fifteen or sixteen centuries ago. Cinerary urns of the same class have been frequently found accompanied with relics corresponding to the era of Roman occupation. But, be it observed, the bronze relics of the Teutonic type corresponding in general style and ornamentation to those discovered in the Scandinavian countries, when found in British sepulchral deposits are almost invariably accompanied with the primitive pottery, or with a class of urns, described in a succeeding chapter, in which we trace the first elements of im-

provement in the manufacture of native fictile ware. This must settle the question of the priority of their deposition to the earliest conceivable era of Scandinavian invasion. The native Britons did unquestionably greatly degenerate after being abandoned by their Roman conquerors; but it is opposed alike to evidence and probability to imagine that they resumed the barbarous arts of an era some centuries prior—a proceeding more akin to the ideas of the modern antiquary than to the practice of a semi-civilized race.

The devices most frequently employed in the decoration of the gold, silver, and bronze relics of this period, are what are called the serpentine and dragon ornaments. They are common to the works of all the northern Teutonic races, and are manifestly to be referred to the same Eastern origin as the wild legends of the Germano-Teutonic and Scandinavian mythic poems, in which dragons, snakes, and other monsters, play so conspicuous a part. Along with these, however, there are other patterns indirectly traceable to Greek and Roman models, as is also observable in the dies of the early Gaulish and British coins. This, however, will be more fully considered in treating of the personal ornaments of the period, but meanwhile we may draw the general conclusion, that the arts of the Iron age pertained to the whole Teutonic races of Northern Europe, and reached both Denmark and Britain from a common source, long prior to the natives of these two countries coming into direct collision. We see that an intimate intercourse was carried on between Britain and Gaul at the very period when the transition to the fully developed Iron age was progressing in the former country: it is easy, therefore, to understand how similar arts would reach the Danish Peninsula and the Scandinavian countries beyond the Baltic. But Scandinavia had long passed her Bronze Period, and succeeding transition era, when she sent forth her hardy Vikings to plunder the British coasts. It was with other weapons than the small leaf-sheaped bronze sword that the Norse rovers came to spoil and desolate our shores.

In recent cuttings, during the construction of the Dublin and Cashel Railway, there were found a number of large and heavy iron swords, which are now deposited in the Museum of the Royal Irish Academy. These Mr. Worsaae examined during his visit to Ireland in 1846, and unhesitatingly pronounced them to be Norwegian. "The swords are long and straight, formed for cutting as well as thrusting, and terminate in points formed by rounding off the edge towards the

back of the blade. The spears are long and slender, and similar in form to the lance-heads used in some cavalry corps."[1] They are formed of a soft kind of iron, like those referred to by Polybius, as in use among the Gauls more than a century prior to the invasion of Julius Cæsar; and, like them, they differ nearly as much in every essential point, as can well be conceived possible, from the bronze sword of the previous era, which has been so perseveringly bandied about by modern antiquaries between Romans and Danes. Mr. Worsaae especially referred to the great size and weight of the swords found in Ireland, and contrasted them with the lighter weapons of the same metal which he believed to be contemporary swords of the native Irish, from whence he drew the inference that Ireland was—like England, France, Germany, &c.—so weak, from about the eighth till the twelfth century, in consequence of intestine wars, that she fell an easy prey to small numbers of Scandinavian invaders. Mr. Worsaae farther remarked of the weapons found at Kilmainham:—"They are so like the Norse swords, that if they were mixed with the swords found in Norwegian, Swedish, and Danish tombs, and now in the collections of Christiania, Stockholm, and Copenhagen, it would be difficult to distinguish one from the other. The form of the handle, and particularly of the knob at the end of the handle, is quite characteristic of the Norse swords. Along with them some other antiquities of undoubtedly Scandinavian origin were also discovered."[2]

The source from whence Europe derived this great gift of iron has yet to be ascertained. It certainly was not from Rome. The Norici, it has already been observed, furnished the chief supplies of iron to Rome, and taught her metallurgists the art of converting it into steel. It is not impossible, however, that it was from the remote North that this source of civilisation was sent to the Mediterranean coasts. British antiquaries have obtained as yet only a partial view of Scandinavian archæology, notwithstanding the valuable publications of Mr. Worsaae. The ancient land of the Scandinavian races includes Denmark,—a country of peculiar geological formation, having abundant stores of silex in its chalk strata, but no minerals to tempt the skill of its aboriginal occupants,—and Sweden, including Norway, a country abounding in minerals, and still furnishing Europe with the finest

[1] Hand-Book of Irish Antiquities, p. 166.
[2] The Antiquities of Ireland and Denmark, by J. J. A. Worsaae, Esq. / Dublin, 1846. P. 14.

iron from its native ores. It is remarkable that this latter country appears, from its primitive relics, to have had its primeval stone period and birth-time of the mechanical arts, but, with the exception of the small district of Sweden adjacent to Denmark, so far as yet appears, this was immediately succeeded by the Iron Period. No bronze archaic era is indicated in its archæological annals. We cannot assume from this, as some are inclined to do, that therefore Norway must have remained an unpeopled waste, while Denmark was advancing into the period of well developed mechanical and ornamental arts. With our present imperfect materials for judging, we are better perhaps to assume nothing, but wait for some able Norwegian archæologist doing that for his native antiquities which Thomsen and Worsaae have done for those of Denmark. Yet good evidence has been furnished in part, especially in one important department, by Professor Nillson's *Skandinäviska Nordens Urinvänare*, or Primitive Inhabitants of Northern Scandinavia, though in this he assigns to the true Swea race, and the first workers of the native iron, no earlier a date as the colonists of Sweden than the sixth century. The *Samlingar för Nordens fornälskare*, already referred to, is also of considerable avail, especially from its copious illustrations. From these we learn that the primitive tumuli-builders of Denmark and Norway are of the same race, and that Norway had her monolithic era, of which no less remarkable traces remain than that of Denmark. Hence we are led to ask the question,—May not her Archaic Period have been an iron instead of a bronze one, and her forges the source from whence the Norici and other Teutonic and Celtic races of Europe learned that the iron-stone was also an ore, and could be smelted and wrought like the more ductile bronze? Northern mythological traditions throw some imperfect and uncertain light on this subject. They refer, for example, to their Gnomes and Dwarfs, their Alfes, and other supernatural metallurgists, as inhabiting mountain regions lying beyond and around them. This is peculiarly noticeable in all the oldest mythic fables, mixed up with the wild inventions of dragons, serpents, and the like fanciful machinery, which tell of their far birth-land in the older continent of Asia. But it is worthy of notice, that the topography of these mythological legends in no way corresponds with the natural features of the Scandinavian peninsulas, lying as they do between two seas. May we not infer, therefore, that they had their origin while yet the Scandinavian

nomades were wandering towards their final destination between the Baltic and the German Ocean, and that these distant mountains, with their metallurgic Gnomes and Alfes, were none other than the mountain ranges of Norway, the mineral treasures of which now furnish so valuable a source of national wealth to their descendants? The Germanic tradition has already been noticed which places the forge of the mythic Weland in the Caucasus, a fading memorial, perhaps, of the wanderings of their Teutonic fathers towards their western home. Such wild traditions must necessarily be used with much doubt and caution; yet they are not meaningless, nor the mere baseless offspring of fancy. Other and more direct evidence may possibly be within reach of the Norwegian archæologist, to induce the belief that the Alfes of his ancestral myths may have been a hardy race of Finnish, Celtic, or other primitive metallurgists, who, like the Norici, supplied the weapons by which themselves were subjugated. All this, however, is advanced with the greatest hesitation, not as a theory which it is proposed to maintain, but only as guessings at truth which lies at present beyond our grasp. By far the most important iron ore wrought in Norway and Sweden is Magnetite, which appears to pertain nearly as exclusively to the North as tin does to the British Isles. The largest known masses occur in Scandinavia, Lapland, Siberia, and in North America. In Norway, Arendal is the most important locality; and in Sweden, Dannemora, Utoe, Norberg, and Taberg. The fine quality of the Magnetite ores is ascribed to their being mixed with calc-spar, thallite, hornblende, and other natural adjuncts advantageous for their reduction, so that the granular ores often require no other flux. Such a condition of the iron ore was manifestly peculiarly calculated to facilitate the processes of smelting and fusing, and thereby to adapt it for working by the primitive metallurgist. Magnetite is not unknown in several of the remoter parts of Scotland, but the distance from fuel has hitherto prevented its application to economic purposes, at least in modern times. Bog iron ore, an hydrated oxide of iron still more readily fused, is also common in Sweden, and abundant in the northern and western islands of Scotland; but though well adapted for castings, it is inapplicable for other purposes. Hæmatite, or specular iron, is another of the most abundant iron ores specially worthy of notice here, because it is found in a state more nearly resembling the metal than any other ore of iron, and occurs in the most ancient

metallurgic districts of England, where the previous native industrial arts were so well calculated to suggest its economic use when observed in such a form. It appears at Lostwithiel, in Cornwall, in the form of fine red crystals of pure iron peroxide, and is also found at Tincroft and St. Just in the same district, and in Devonshire, Wales, Cumberland, and Perthshire. Such are some of the lights by which mineralogy enables us to trace out the probable origin of the working of iron in Europe; but after all, it is to Asia we are forced to return for the true source of nearly all our primitive arts, nor will the canons of Archæology be established on a safe foundation till the antiquities of that older continent have been explored and classified. The advocate of Druidical theories may find his so-called "Druidical temple" in the steppes of Asia as well as on Salisbury Plain; and probably very many other supposed national relics, exclusively appropriated by the local antiquary, will yet be discovered to have their types and counterparts in the evidences of primitive Asiatic art.

"Sepulchral tumuli are spread over all the northern and western parts of Europe, and over many extensive regions in northern Asia, as far eastward at least as the river Yenisei. They contain the remains of races either long ago extinct, or of such as have so far changed their abodes and manner of existence, that the ancestors can no longer be recognised in their descendants. They abound on the banks of the great rivers Irtisch and Yenisei, where the greatest numbers of the then existing people were collected, by the facilities afforded to human intercourse. In Northern Asia these tombs are ascribed to Tschudes, or barbarians, nations foreign and hostile to the Slavic race. The erectors of these sepulchral mounds were equally distinct and separate from the Tartar nations, who preceded Slaves; for the tombs of the Tartars, and all edifices raised by them, indicate the use of iron tools; and the art of working of iron mines has ever been a favourite attribute of the Tartar nations. But silver and golden ornaments of rude workmanship, though in abundant quantity, are found in the Siberian tombs. The art of fabricating ornaments of the precious metals seems to have preceded by many ages the use of iron in the northern regions of Asia."[1]

Keeping these important facts in view, which so entirely coincide with the ascertained truths of primitive European history, it is still worthy of note that there appears to be something altogether remarkable in the archæology of Sweden and Norway, destitute as these countries would appear to be of the traces of the primitive metallurgic arts discoverable elsewhere, equally in the Asiatic seats of earliest population, and in the other European countries colonized

[1] Prichard's Natural History of Man.

by the Arian nomades. If we accept the conclusions arrived at by Professor Nillson, that the Swea race did not settle in Scandinavia till the sixth century, we shall be the more certainly forced to the conclusion that they were then a people far advanced in the arts of civilisation; since it is the same race whose powerful fleets are found ravaging the northern coasts of Europe in the ninth century, establishing colonies on their shores, and soon after planting Scandinavian settlements in Iceland, Greenland, and in Vinland on the continent of North America. Leaving, however, the question of dates to further inquiry, the curious coincidence of these northern mythological fables with the topography of the country and the peculiar characteristics of its primitive antiquities, suggest the conclusion that the latest intruding race brought with it—probably from Asia—a knowledge of the art of working the metals; and found on settling in the northern Scandinavian countries that their predecessors were already familiar with the mineral treasures of the North, and knew how to smelt the dark iron-stone and convert it to economic purposes. The latter, according to the craniological investigations of Professor Nillson, were a race of Celtic origin, having skulls longer than the first and broader than the second of the two elder races of the Scandinavian barrows. There is therefore nothing in the ethnological character of the race inconsistent with such metallurgic skill, but, on the contrary, much to add to the probability of an early practice of the arts of the founder and the smith, the Celtæ having shewn, wherever circumstances favoured it, a remarkable aptitude for working in metals.

This digression pertains, perhaps, more to general Archæology than to the direct elucidation of Scottish antiquities. But independently of the legitimate interest attached to the inquiry into the origin of these metallurgic arts which brought civilisation in their train, the history of Scotland at the period we are now approaching is more intimately connected with Norway than with any other country, except Ireland. To the primitive Scandinavian literature we still look for some of the earliest traces of authentic national history; and whatever tends to illuminate the Iron Period of the North can hardly fail to throw some light upon our own. This must be the work of the archæologists of Scandinavia; nor are they insensible to its importance.

The traditional Vœlund-myth has already been attempted to be connected with a definite historic epoch, the reign of King Nidung,

king of Nerika, in Sweden, in the sixth century. Such a mode of interpretation, however, shews a very imperfect appreciation of the true nature of this remarkable myth, which belongs in reality to no single country, but is as essential a link in the history of the human race as are to each of us the momentous years which form the stage between infancy and manhood. We cannot, indeed, too speedily abandon this misdirected aim, of seeking for precise dates of epochs in primitive history. With these the archæologist, in his earlier historical investigations, has generally little more to do than the geologist. Both must rest content with a relative chronology, which yet further investigation will doubtless render more definite and precise. Where dates are clearly ascertainable, the archæologist will gladly avail himself of them; and in this Iron Period much of the indefiniteness of primeval annals gives place to authentic history. But while rejecting the localization of the Vœlund-myth at the court of Nerika, it is of importance for our present purpose to note the general evidences of Scandinavian progress in the arts by which nations attain their majority. Not in the ninth century only, but perhaps in this era of King Nidung, in the sixth century, or in the fifth or fourth—we know not indeed how early—the Northmen may have begun to build ships, and learned boldly to quit their fiords for the open sea. Our annals prior to the ninth century are so meagre that we must lie open to the recovery of many traces of important events unnoted by them, in the interval between that ascertained epoch and the older one when the Roman legions were compelled to abandon the vallum of Antoninus, and repair the barrier beyond the Tyne. We cannot too speedily disabuse ourselves of the idea, that because no Celtic or Scandinavian Herodotus has left us records of our old fatherland, therefore the North had no history prior to its Christian era. We owe to the Romans the history of centuries which otherwise must have remained unwritten, yet not the less amply filled with the deeds of Cassivelaunus, Boadicea, Galgacus, and many another hero and heroine, all unsung; though they wanted but their British Homer, or Northern Hermes with his graphic runes, to render the sieges of the White Caterthun as world-famous as that of Troy.

CHAPTER II.

THE ROMAN INVASION.

THE fashion of Scottish archæologists in dealing with our national antiquities has heretofore most frequently been to write a folio volume on the Anglo-Roman era, and huddle up in a closing chapter or appendix some few notices of such obdurate relics of primitive nationality as could in no way be forced into a Roman mould. Some valuable works have been the result of this exclusive devotion to one remarkable epoch; but since this has been so faithfully explored by Camden, Sibbald, Horsley, Gordon, Roy, Chalmers, and Stuart, there is good reason why we may be excused following the example of the Antiquary *par excellence*, and plunging, "nothing loth, into a sea of discussion concerning urns, vases, votive altars, Roman camps, and the rules of castrametation," with copious notations on the difference between the mode of entrenching *castra stativa* and *castra æstiva*, "things confounded by too many of our historians!"

To English archæologists the Anglo-Roman Period is one of the greatest importance; for the Romans conquered and colonized their country, taught its inhabitants their religion, sepulchral rites, arts, and laws, and, after occupying the soil for centuries, left them a totally different people than they had found them. There is something, moreover, in the very geological features of the south-eastern districts of England, which the Romans first and chiefly occupied, at once more readily susceptible and more in need of such external influences. It cannot, indeed, be overlooked, among the elements of ethnological science, that the geological features of countries and districts exercise no unimportant influence on the races that inhabit them. The intel-

ligent traveller detects many indications besides the mere difference of building materials, when he passes from the British chalk and clay to the stone districts. To the Romans it can hardly be doubted that England owes the art of converting her clay into bricks and tiles; and that in all probability, the P. P. BRI. LON.—*præfectus primæ [cohortis] Britonum Londinii ?*—stamped on recently discovered Roman tiles found on the site of modern London,[1] indicate some of the products of the kilns by which the inexhaustible bed of London clay was first converted to economical uses. The Roman mansion, with its hypocaust and sudatorium, its mosaic paving and painted walls, its sculptures, bronzes, and furnishings of all sorts, introduced the refinements of classic Italy into the social life of England; while the disciplined hardiness of legionary colonists tempered the excesses of Roman luxury. New wants were speedily created, and many dormant faculties excited into action among the intelligent native tribes. The older British pottery entirely disappeared, superseded by the skilful products of the Anglo-Roman kiln, or the more beautiful imported Samian ware. England might, and indeed did, greatly degenerate when deserted by her conquerors, but it was altogether impossible that she could return to her former state. The footmark of the Roman on the soil of England is indelible. It forms a great and most memorable epoch between two widely different periods, the influence of which has probably never since ceased to operate, and hence the important place which it still continues to occupy in English archæology.

The history of the Scoto-Roman invasion is altogether different from this. It is a mere episode which might be altogether omitted without very greatly marring the integrity and completeness of the national annals. It was, for the most part, little more than a temporary military occupation of a few fenced stations amid hostile tribes. Julius Cæsar effected his first landing on the shores of Britain in the year B.C. 55; but it was not till after a lapse of 135 years—as nearly as may now be guessed, in the summer of A.D. 80—that Agricola led the Roman army across the debatable land of the Scottish border, and began to hew a way through the Caledonian forests. Domitian succeeded to the throne of Titus in the following year, while the Roman legions were rearing their line of forts between the Forth and the Clyde; and the jealousy of the tyrant speedily wrested the govern-

[1] Collectanea Antiqua, vol. i. p. 144.

ment of our island from the conqueror of Galgacus. From that period till the accession of the Emperor Hadrian, in A.D. 117, the Roman historians are nearly silent about Britain; but we then learn that the Roman authority was maintained with difficulty in its island province; and when Hadrian visited Britain the chief memorial he left of the imperial presence was the vallum which bore his name, extending between the Solway and the Tyne. Up to this period, therefore, it is obvious that the Roman legions had established no permanent footing in Caledonia—using that term in its modern and most comprehensive sense; nor was it till the accession of Titus Antoninus Pius to the Imperial throne, and the appointment of Lollius Urbicus to the command in Britain, nearly two centuries after the first landing of Cæsar in England, that any portion of our northern kingdom acquired a claim to the title of *Caledonia Romana*. Lollius Urbicus, the legate of Antoninus Pius, fixed the northern limits of Roman empire on the line previously marked out by the forts of Agricola; and beyond that boundary, extending between the Forth and the Clyde, nearly the sole traces of the presence of the Romans are a few earthworks, with one or two exceptions, of doubtful import, and some chance discoveries of pottery and coins, mostly ascribable, it may be presumed, to the fruitless northern expedition of Agricola, after the victory of Mons Grampius, or to the still more ineffectual one of his successor, Severus. In this extra-mural region, indeed, lies the celebrated Roman military work, Ardoch Camp, within the area of which was discovered the sepulchral memorial of Ammonius Damionis, the only Roman inscription yet found north of the Forth. Such an exception is the strongest evidence that could be produced of the transitory nature of Roman occupation in the region beyond the boundaries fixed by Lollius Urbicus.

Here, then, we have the proprætor of Antoninus Pius established within the line of ramparts which bear the Emperor's name, A.D. 140. The Roman soldiers are busy building forts; raising each their thousand or two paces of the wall, and recording the feat on the legionary tablets which still attest the same; constructing roads and other military works; and establishing here and there coloniæ and oppida, with a view to permanent settlement. For a period of about twenty years, during which Lollius Urbicus remained governor of the province, peace appears to have prevailed; and to this brief epoch, when a Roman navy was stationed on the coasts of Britain,

we may, with great probability, ascribe the rise of Inveresk, Cramond or Alaterva, and other maritime Roman colonial or municipal sites. With the death of the able Titus Antoninus, whom grateful Roman citizens surnamed Pius, all this was at an end. Calphurnius Agricola had to be despatched by the new emperor, Marcus Aurelius, to put down an insurrection of the British tribes. The reign of his successor Commodus was marked by a still more determined rising of the North. The Caledonian Britons again took to arms, assailed the legions with irresistible force, defeated them and slew their general, broke through the rampart of Antoninus, and penetrated unchecked into the most fertile districts of the Roman province of Valentia, as it was subsequently named, comprehending the whole district between the walls of Hadrian and Antoninus which at a later period became the Saxon kingdom of Northumbria. Another legate, Ulpius Marcellus, had to hasten from Rome to arrest the Caledonian invaders, and a few more years of doubtful peace were secured to the northern province. Lucius Septimius Severus succeeded to the purple A.D. 197, learned that the Caledonian Britons were once more within the ineffectual ramparts; and after a few years of timid negotiation, rather than of determined opposition to these hardy northern tribes, Virius Lupus, the legate of Severus, was compelled to own that the occupation of Caledonia was hopeless. The aged emperor immediately commenced preparations for marching in person against the Caledonians. About A.D. 208 he effected his purpose, and entered Caledonia at the head of an overwhelming force; but it was in vain. He penetrated indeed as far, it is thought, as the Moray Frith, but only to return, with numbers greatly reduced, to fix once more the limits of Roman empire where they had been before marked out by the wall of Hadrian, between the Solway and the Tyne. It is possible, indeed, that the northern wall was not immediately abandoned. At Cramond have been found both coins and medals of Caracalla and Diocletian. The Roman tenure of the North, however, was manifestly insecure; and the successor of Severus was little likely to recover what that able emperor had been compelled to abandon.

A period of sixty-eight years is thus the utmost that can be assigned for this occupation of Caledonia as a Roman province, and the history of that brief era is amply sufficient to justify the oft-claimed title—whatever be its value—of the unconquered Caledonians. The tribes in the immediate vicinity of the garrisoned strongholds of the in-

vaders might be overawed and forced into apparent submission; but the country was no more subdued and rendered a tributary province than when Edward made himself the arbiter between Baliol and the Bruce.

The successors of Severus were glad to secure the forbearance of the Caledonians on any terms; and for seventy-three years after the departure of his sons from Britain its name is scarcely mentioned by any Roman writer. In subsequent allusions to the restless inroads of the Caledonians on the southern province, they are mentioned for the first time in the beginning of the fourth century by the name of Picts; but it is not till the reign of the Emperor Valentinian, in the latter part of the fourth century, A.D. 367, that we find the Roman legions under Theodosius effectually coping with the northern invaders, and recovering the abandoned country between the walls of Antoninus and Severus. This was now at length converted into a Roman province, and received the name of VALENTIA, in honour of the emperor; and to this latter occupation should probably be ascribed the rise of most of the inland coloniæ, the traces of which are still recoverable. But its meagre history is that of a frontier province. The Picts were ever ready to sally forth from their mountain fastnesses on the slightest appearance of insecurity or intermitted watchfulness. Again and again they ravaged the southern provinces, and returned loaded with spoil; and it is chiefly to the notices of their inroads and repulsions that we owe the possession of any authentic history of North Britain in the fourth century. Early in the fifth century, about the year 422, a Roman legion made its appearance in Scotland for the last time. They succeeded in driving back the Picts beyond the northern wall, as a disciplined force must ever do when brought into direct collision with untrained barbarian tribes; but it was no longer possible to retain the province of Valentia. The legionary colonists and the Romanized Britons were advised to abandon it, and once more withdraw within the older limits fixed by Severus on the line of Hadrian's Wall. So ended the second and last Roman occupation of Scotland, extending over a period of about fifty years. It is to this latter era that we should probably assign the establishment of the Roman town near the Eildon Hills, as well as of other sites in the interior of the country, bearing traces of Roman occupation, which it has been customary to seek for among the stations mentioned by Ptolemy. Roy, for example, adhering to one of

the names given by Ptolemy, while he rejects the locality which he assigned to it, fixes the site of *Τριμοντιον*, or *Trimontium*, in the neighbourhood of the Eildons, because "the aspect of the hills corresponds exactly with the name."[1] In this he has been implicitly followed by later writers. But *Trimontium* is a mere Latinized version of Ptolemy's *Τριμοντιον*, and does not necessarily signify *Tres Montes*, the supposed designation suggested by the triple summits of the Eildon Hills; unless, as is possible, the name is only a Greek rendering of the original *Tres Montes*, which has been anew transformed into the later Latin form. Still the mere resemblance of the name to certain features of an ascertained Roman site is very insufficient evidence in contradiction to the more precise information of the old geographer, as well as to the probability of the later origin of the Eildon town. We must therefore leave Trimontium where Ptolemy places it, in the district of the Selgovæ, not far from the military station at Birrens, although it will be shewn that very extensive Roman traces, unknown to General Roy, do exist in the neighbourhood of the Eildon Hills. The first period of the Roman presence in Scotland in the second century was obviously little more than an occupation of military posts; the second, in the latter end of the fourth century, was the precarious establishment of a Roman province on a frontier station, and within sight of a foe ever watching the opportunity for invasion and spoil.

Hence the paucity of Roman remains in Scotland, and the trifling influence exercised by Roman civilisation on its ancient arts. Roman pottery has been found in considerable quantities on the sites of well-known forts and stations, but no Roman kiln has yet been discovered in Scotland, such as suffices in England to shew how completely native arts were superseded by those of the Italian colonists. Few, indeed, of the memorials which the Romans have left of their presence in Scotland pertain to the practice of the peaceful arts. Their inscriptions, their altars, and their sepulchral tablets, all relate to the legionary, and shew by how precarious a tenure his footing was maintained beyond the Tyne. No evidence serves more completely to prove this transitory and exotic character of the occupation of the country than the traces of Roman masonry. Passing beyond the limits assigned by Hadrian to Roman dominion, the legions entered on a country the geological features of which are totally dissimilar to any part of Britain which they had previously acquired. Yet the ruins of their

[1] Roy's Military Antiquities, p. 116.

buildings, discovered in the very centre of the Lothians, shew that they brought with them the art of the brickmaker, and manufactured their building materials by the same laborious process above the fine sandstone strata of the Frith of Forth, as within the chalk and clay districts of England, where their earliest settlements were effected.

This evidence of the practice of exotic arts becomes still more noticeable on the sites of some of the wall-stations. At Castlehill, for example, the third station from the west end of the rampart of Antoninus, though the fort no longer exists, its materials have been employed in erecting the farm-offices and inclosures which now occupy its commanding site. Here, so recently as 1849, an inscribed tablet of the Twentieth Legion was discovered. On visiting the station the intelligent observer can hardly fail to be struck with the peculiar character of the stones built into the new walls, and lying about where they have been turned up by the plough. The legionary builders would seem to have found clay unattainable, or inconvenient to work, and were sufficiently remote from the Clyde to render importation unadvisable. They have accordingly been compelled to resort to stone; but true to the more familiar material, they have with perverse ingenuity hewn it into the shape and size of the common Roman brick, making in fact, as nearly as possible, bricks of stone. It is not improbable that similar relics may still exist at some places on the line of Hadrian's Wall; such, however, is not the case with its more substantial successor. When Severus abandoned the northern rampart and rebuilt a wall nearly on the line of that of Hadrian, the Anglo-Roman occupants of Northumbria were no longer strangers to the peculiar facilities of the district, and the wall of Severus accordingly exhibits many traces of substantial masonry, such as antiquaries familiar only with the Roman remains of the clay districts can scarcely persuade themselves are the work of the same builders who wrought with chalk and brick, or bonded even their stone walls in the south with courses of Roman tile.

Another conclusive proof of the temporary and mere military occupation of Scotland by the Romans, appears from the fact, that with a very few exceptions the Scoto-Roman remains have been brought to light on the line of the Antonine Wall. A very remarkable altar was found at Inveresk, near Edinburgh, so early as 1565, dedicated APOLLINI GRANNO, by Quintus Lusius Sabinianus, proconsul of Augustus, which possesses a singular interest to us from the fact that it attracted the

special notice of Queen Mary of Scotland. In her treasurer's accounts appears the charge of twelve pence paid "to ane boy passand of Edinburgh with ane charge of the Queenis Grace, direct to the Baillies of Mussilburgh, charging thame to tak diligent heid and attendance that the monument of grit antiquitie, new fundin, be nocht demolisit nor broken down;" an evidence of archæological taste and reverence for *monuments of idolatry*, which probably did not in any degree tend to raise the queen in the estimation of the bailies of the burgh. The same ancient relic became an object of interest to Randolph and Cecil, the ambassador and minister of Queen Elizabeth,[1] and afterwards furnished Napier of Merchiston with an illustration of the idols of pagan Rome when writing his Commentary on the Apocalypse. This remarkable monument of the Roman colonists of Inveresk must have been preserved for some generations, as Sir Robert Sibbald mentions having seen it.[2] He died about the year 1712, and the Itinerarium Septentrionale of Gordon, in which no notice of it occurs, was published only fourteen years later. The remains of Roman villas with their hypocausti, flue-tiles, pottery, and other traces of Italian luxury, have been found at various times in the same neighbourhood, leaving no room to doubt that an important Roman town was once located on the spot. A few miles to the west, along the coast of the Forth, the little fishing village of Cramond is believed to occupy the site of the chief Roman sea-port on the east of Scotland. There also altars, inscribed tablets, coins, and other relics, attest the importance of the ancient *Alaterva*. Newstead, near the Eildons, has also furnished one altar, and Birrens, the old *Blatum Bulgium*, several inscriptions and sculptures. But even these are nearly all military relics, chiefly of the first and second Tungrian cohorts; and if to them are added some few fragments of sculpture and pottery, and examples of bronze culinary vessels, we have a summary of nearly the whole Roman remains found in Scotland, apart from the stations on the wall of Antoninus, and the celebrated Arthur's Oon, the supposed *Templum Termini*, of which so much has been written to so little purpose. The earliest writer who notices this remarkable architectural relic is Nennius, abbot of Bangor, as is believed, in the early years of the seventh century. His own era, however, is matter of dispute, and his account sufficiently confused and contradictory. Its masonry appears to have differed entirely from any authentic remains of Roman building found in

[1] Archæol. Scot. vol. ii. [2] Historical Inquiries, p. 41.

Scotland, and, indeed, to have had no very close parallel anywhere; though its form very closely coincided with the round or bee-hive houses of Ireland, and its masonry was not greatly dissimilar to that of the Scottish round towers of the same builders, by whom it was more probably erected. The total absence of cement must at least be sufficient with most English antiquaries, to throw no little doubt on its Roman origin. The modern archæologist may be pardoned if he smile at the enthusiasm of elder antiquaries, who discovered in this little sacellum, or stone bee-hive, of twenty-eight feet in diameter and twenty-two feet in height, a fac-simile of "the famous Pantheon at Rome, before the noble portico was added to it by Marcus Agrippa," to which Gordon—the ever-memorable Sandy Gordon of the Antiquary—resolved not to be outdone by Dr. Stukely, adds, "The Pantheon, however, being only built of brick, whereas Arthur's Oven is made of regular courses of hewn stone!" Sir John Clerk, writing to Mr. Gale, shortly after the destruction of the Oon, remarks,—"In pulling these stones asunder, it appeared there had never been any cement between them, though there is limestone and coal in abundance very near it. Another thing very remarkable is, that each stone had a hole in it which appeared to have been made for the better raising them to a height by a kind of forceps of iron, and bringing them so much the easier to their several beds and courses."[1] These facts we owe to the barbarian cupidity of Sir Michael Bruce, on whose estate of Stonehouse this remarkable and indeed unique relic stood. The same zealous Scottish antiquary, quoted above, writing from Edinburgh to his English correspondent in June 1743, remarks with quaint severity,—"He has pulled it down, and made use of all the stones for a mill-dam, and yet without any intention of preserving his fame to posterity, as the destroyer of the Temple of Diana had. No other motive had this Gothic knight but to procure as many stones as he could have purchased in his own quarries for five shillings! . . . We all curse him with bell, book, and candle,"—an excommunicatory service not yet fallen wholly into disuse. Of this unique architectural relic sufficiently minute drawings and descriptions have been preserved to render it no difficult matter to reconstruct, in fancy, its miniature cupola and concentric courses of stone; but it still remains an archæological enigma, which the magic term *Roman* seems by no means satisfactorily to solve.

[1] Biblo. Topog. Britan. vol. ii. p. 385.

The course of Antoninus's rampart and military road lay through a part of the country since repeatedly selected by later engineers from its presenting the same facilities which first attracted the experienced eye of Agricola, and afterwards of Lollius Urbicus, as the most suitable ground for the chief Roman work in Scotland. Gordon, it is understood, acquired his chief knowledge of the Roman remains of this district while examining the ground with a view to the formation of a projected Forth and Clyde Canal.[1] General Roy again surveyed the same ground, through which at length the Canal, and still more recently the Edinburgh and Glasgow Railway, have been carried; in each case leading to interesting discoveries of Roman remains.

The most remarkable of these disclosures took place at Auchindavy during the construction of the Forth and Clyde Canal, when a pit was discovered within the area of the Roman fort, containing five altars, a mutilated statue, and two ponderous iron hammers. Four of the altars, and probably the fifth, had been erected by one individual, M. Cocceius Firmus, a centurion in the Second Legion, Augusta. Their position, thus hastily thrown together and covered up on the spot where they were destined to lie undiscovered for so many centuries, seems to tell, in no unmistakable language, of the precipitate retreat of the Roman garrison from the fort of Auchindavy, which had been committed to the charge of the devout centurion who was thus compelled to abandon his desecrated aræ. All these, as well as most of the other relics found from time to time along the line of the Roman wall, have been deposited in the Hunterian Museum at Glasgow. They mark most emphatically the dawn of a totally new era in Scottish archæology. Definite historic annals henceforth come to the aid of induction. Dates take the place of periods, and individuals that of races. Unhappily also, with the definiteness of written records, we come in contact with doubts far more difficult to solve than many of those which have to be unravelled from the unwritten primeval records, since it is no longer the accuracy of the induction, but the veracity of the annalist, that has most anxiously to be looked

[1] Caledonia Romana, p. 270. I am informed, however, by Sir George Clerk, Bart., of Penicuick, that the author of the *Itinerarium Septentrionale* was originally a teacher of music at Aberdeen, and according to the traditions of the Penicuick family, was usually known by the name of *Galgacus*, being no doubt apt to carry his enthusiasm for his favourite hero of Mons Grampius to an extent somewhat amusing, if not troublesome, to friends and patrons.

to. Such, however, is not the case with the inscribed evidences of the presence of the Roman legions.

Fortunately for the Scottish antiquary the builders of the Caledonian Wall appear to have taken a peculiar and unprecedented pleasure in recording their share in this great work, actuated thereto, in part perhaps, by the reverence with which the name of Titus Antoninus was regarded alike by Roman soldiers and citizens. These legionary inscriptions, peculiar to the Scottish wall, indicating the several portions of it erected by the different legions and cohorts, are most frequently dedications of the fruit of their labours to the Emperor, Father of his Country. They are objects of just interest and historical value, supplying definite records of the legions by whom the country was held during the brief period of Roman occupation, and meting out to the modern investigator a measure of information more suited to his desires than he could hope to recover of so remote and poor a province of the Roman empire, from the notices of any contemporary author.

Only one of all the Roman historians, Julius Capitolinus, the biographer of the Emperor Antoninus Pius, makes any allusion to the erection of the Caledonian Wall; and on his sole authority, for fully fourteen centuries, rested the statement that the imperial legate, Lollius Urbicus, reared the vallum which still in its ruins perpetuates the name of the Emperor, and preserves, as a visible link between the present and the past, the northern limit of the Roman world. The very site of the several British walls was accordingly matter of dispute, when fortunately, towards the close of the seventeenth century, a rude and very imperfect fragment of an inscribed tablet was discovered at or near the fort of Bemulie,[1] which in point of historical value surpasses any Roman relic yet found in Scotland. The inscription is such a mutilated fragment that the farmer might have turned it up with his plough and flung it from the furrow, or the mason broken it up to build into his fence, without either of them dreaming that it differed in value from any other stone, though its few roughly inscribed letters supply a fact indispensable to the integrity of Scottish history. Gordon pronounces it "the most invaluable jewel of antiquity that ever was found in the island of Britain since the time of the Romans." It is the fragment of a votive tablet, so imperfect that it is doubtful whether it be a dedication by the Second

[1] Roy's Military Antiquities, p. 152.

Legion in honour of the Imperial Legate, or by the latter in honour of the Emperor. It contains, however, the names of both, and establishes the only essential fact, that the wall between the Forth and the Clyde is the work referred to by Julius Capitolinus. The stone, which now forms one of the treasures of the Hunterian Museum, measures seventeen by ten inches, and bears the abbreviated and mutilated inscription :—

P · LEG · II · A ·
Q · LOLLIO · VR
LEG · AVG · PR · PR

No great error can be committed in thus extending it as a votive tablet in honour of the Legate, rather than of the Emperor: POSUIT LEGIO SECUNDA AUGUSTA QUINTO LOLLIO URBICO LEGATO AUGUSTI PROPRÆTORI.

The ordinary legionary inscriptions include the name and distinctive titles of the legion, cohort, or vexillation, by whom the number of paces of the wall recorded on them have been erected; and dedicate the work in honour of the emperor. The larger tablets are generally adorned with sculptured decorations, and frequently bear the device of the legion; that of the Twentieth Legion being the Boar; and probably that of the Second Legion, surnamed Augusta, the Sea-Goat. One singular sculptured legionary tablet, however, found at Castlehill, the site of the third station on the wall, seems to leave little room for doubt that this fanciful hybrid of the goat and seal was also employed as the emblematical symbol of Caledonia, and may have been adopted by the Second Legion to commemorate their victories over the hardy race whom it not inaptly symbolized. It is a tablet recording with less abbreviation than usual the completion of 4666 paces of the wall by the Second Legion, Augusta:

IMP · CAES · TITO · AELIO ·
HADRIANO · ANTONINO ·
AVG · PIO · P · P · LEG · II
AVG · PER · M · P · IIII · DC
LXVI · S

On one side of this inscription appears a literal representation of imperial triumph:—captives stripped and bound, above them a mounted Roman armed and in full career, and over all a female figure, supposed to bear a wreath emblematic of Victory. On the other side is the Roman eagle perched on the prostrate sea-goat, the manifest counterpart of the literal exhibition of the conquered Caledonians.

The origin of the singular emblem, however, is still open to question. It may be doubted if it was a Roman emblematic device, though familiar to them as the most usual form of Capricornus, for the imperial conquerors more generally adopted the most characteristic literal representations of the vanquished. It occurs on a rare coin figured by Gough, and now ascribed to Comius, about B.C. 45; but it may also be seen as the zodiacal sign, on a very remarkable calendar cut in marble, which was found in a ruined villa of Pompeii.

The Roman fort at Castlehill, where the above tablet was dug up, was one of the inferior class; its small dimensions arising, in part at least, perhaps, from the natural advantages of its position. The discoveries on its site, however, are possessed of greater interest than those yet known belonging to some of the largest stations on the wall. In the year 1826, a votive altar was brought to light on the same locality, dedicated, as Mr. Stuart renders it,[1] to the Eternal Field-Deities of Britain—CAMPESTRIBUS ET BRITANNI—by Quintus Pisentius Justus, prefect of the fourth cohort of Gaulish auxiliaries; a cohort which we learn from another altar discovered in Cumberland was afterwards stationed on the wall of Severus.

There are altogether in the Hunterian Museum six altars, twelve legionary inscriptions, and several centurial stones, all found along the line of the Caledonian Wall, besides a few more of each known to be in private hands. But nearly the whole of these have been so frequently described and engraved, that it would be superfluous to repeat their inscriptions here. One interesting discovery, however, made at Castlehill, since the publication of the Caledonia Romana, deserves to be noted. It was found during the spring of 1847, by the plough striking against it, where it lay imbedded in the soil with its edge upward, as if it had been purposely buried at some former period, in the shady ravine called the Peel Glen: a dark and eerie recess, where the *Campestres Æterni Britanniæ*, the fairies of Scottish folk-lore, have not yet entirely ceased to claim the haunt accorded to them by immemorial popular belief. The Roman relic discovered here is a square slab, considerably injured at the one end, but with the inscription fortunately so slightly mutilated that little difficulty can be felt in supplying the blank. The stone measures two feet six inches in

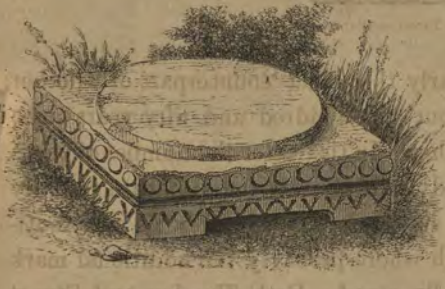
[1] Caledonia Romana, p. 305.

greatest length, and two feet four inches in breadth. A cable-pattern border surrounds it, within which is the inscription.

Roman Tablet, Castlehill.

This sculptured tablet is nearly the exact counterpart of another legionary inscription found about one hundred and fifty years since in the neighbourhood of Duntocher. In the latter the number of paces is defaced in the inscription, and unfortunately the duplicate recently discovered, which should have supplied the deficiency, is also mutilated, the break passing through where probably the additional mark of the fourth thousand originally stood. Both Horsley and Stuart guessed from the smallness of the space left for the figures in the former, that it must have been a round number, either III. or IIII. This argument is equally conclusive in regard to the inscription recently found, and little doubt can be entertained that the reading should be four thousand paces. It will doubtless appear to most men of this nineteenth century a matter of sufficient indifference, now that the Edinburgh and Glasgow Railway occupies the line of the Roman vallum, whether the vexillation of the Twentieth Legion dedicated three or four thousand paces of their long obliterated wall to the Emperor whose name it bore. This tablet, however, establishes an additional fact suggested by some previous discoveries, that the legionaries were wont to erect these stones in pairs at the beginning and the end of their labours, thereby the more distinctly defining the extent of the work dedicated by them to the favourite emperor. The inscriptions heretofore found at the Castlehill Station, furnish no evidence of the presence of the Twentieth Legion as the garrison of that fort. At one

time it appears to have been held by a detachment of the Second Legion, Augusta—the sculptors of the curious emblematic relievo of Caledonian defeat; and at another by the fourth cohort of Gaulish auxiliaries, as we learn from the votive altar of their prefect. The former were doubtless the contemporaries of the Twentieth Legion who, located at Duntocher, reared there the Roman fort, and constructed the vallum eastward till it joined the work of the Second Legion at Castlehill. This is confirmed by the diversity of the sculpture on the two slabs. Underneath each inscription is the wild boar, the symbol almost invariably figured on the works of the Twentieth Legion. They are disposed, however, in opposite directions, so that when the slabs were placed on the southern or Roman side of the wall, where they would be seen from the adjacent military road, the boars of the twin legionary stones would be facing each other.[1] Still more recent agricultural operations on the Castlehill farm have brought to light during the autumn of the present year, 1850, extensive indications of the remains of buildings in the immediate vicinity of the Peel Glen, where the tablet of the Twentieth Legion was discovered. The most remarkable feature hitherto exposed by these later operations is the singularly sculptured base of a column figured here; but these chance discoveries leave little room to doubt that a systematic trenching of the area of the fort would amply repay the antiquary for his labour.



Thus minute and circumstantial is the information still recoverable at this distance of time regarding the Roman colonists of Britain. Every century yields up some further additional records, and were we in possession of all the inscriptions graven on votive altars or set up on tablets and centurial stones, we would possess more ample and authentic elements for the history of the Roman occupation of Scotland than all that classic historians supply. Sufficient, however, has been preserved to furnish a very remarkable contrast between the

[1] The preservation of this Scoto-Roman relic is due to the zeal of John Buchanan, Esq., its present possessor, who secured it after it had been in vain offered to the curators of the Hunterian Museum, as an appropriate addition to its Roman collection.

relics of the Roman invasion and every other class of the archæological records of primitive Scottish history.

The whole of the legionary inscriptions and nearly all the altars and other remarkable Roman remains found on the line of the ancient vallum, have been discovered at its western end. No railway or other great public work has traversed its eastern course. The sites of its forts are uncertain or altogether unknown, and its famous *Benval* is not yet so entirely settled as to preclude all controversy, should antiquaries think the theme worthy of further contest. From time to time some new discovery adds to our materials for the history of the Roman occupation of Scotland, and many records of the builders of the ineffectual rampart of Antoninus probably still lie imbedded beneath its ruined course. It is more important for our present purpose to observe that the discoveries which have been made on some single Anglo-Roman sites greatly exceed all that has ever been brought to light in Scotland truly traceable to the Roman occupancy. No archæological relics can surpass in interest or value the legionary inscriptions peculiar to our Scottish wall, so precise and definitely minute in the information they have hoarded for behoof of later ages. But they are purely military records, the monuments, in reality, of Roman defeat; while of the evidences of Roman colonization and the introduction of their arts and social habits, it is far short of the truth to say, that more numerous and valuable Anglo-Roman antiquities have been brought to light within the last few years at York, Colchester, or Cirencester, than all the Roman remains brought together from every public and private museum of Scotland could equal.

> "How profitless the relics that we cull,
> Troubling the last holds of ambitious Rome,
> Unless they chasten fancies that presume
> Too high, or idle agitations lull!
> . . . . . Our wishes what are they?
> Our fond regrets tenacious in their grasp?
> The sage's theory? the poet's lay?—
> Mere fibulæ, without a robe to clasp;
> Obsolete lamps, whose light no time recalls;
> Urns without ashes, tearless lachrymals!"[1]

It is of importance to our future progress that this should be thoroughly understood. English archæologists, we may be permitted to think, have devoted their attention somewhat too exclusively to the

[1] Wordsworth.

remains of a period on which information was less needed than on most other sections of archæological inquiry. Still the field of Anglo-Roman antiquities is an ample one, and therefore well-merited to be explored. But when Scottish archæologists, following their example, fall to discussing the weary battle of Mons Grampius—the site of Agricola's Victoria, founded at Abernethy, or elsewhere—and the like threadbare questions, they are but thrashing straw from which the very chaff has long since been gleaned to the last husk, and can only bring well-deserved ridicule on their pursuits.

In the present brief glance at the indications of Roman occupation of Scotland little more is needed for fulfilling the plan of the work than to note a few of the most interesting Scoto-Roman relics, including such as have either been discovered since the publication of the "Caledonia Romana," or have escaped the notice of its industrious and observant author. It is surprising, however, that under the latter class has to be mentioned the most beautiful specimen of Roman sculpture existing in Scotland. In the front of an old house in the Nether-Bow of Edinburgh there have stood, since the early part of last century—and how much longer it is now vain to inquire—two fine profile heads in high relief, the size of life, which, from the close resemblance traceable to those on the coins of Severus, there can be no hesitation in pronouncing to be designed as representations of the Emperor Septimius Severus and his Empress Julia. They were first noticed by Gordon in 1727, and are described by Maitland about twenty years later, in a sufficiently confused manner, but with the additional local tradition that they had formerly occupied the wall of a house on the opposite side of the street. A medieval inscription, corresponding in reading as well as in the probable date of its characters, to the Mentz Bible, printed about the year 1455, has been intercalated between the heads of the emperor and empress, and seems, as it were, to furnish an earlier witness from the fifteenth century, to say that the Roman sculpture is still *in situ*.

It admits of serious doubt whether the discovery at Copenhagen, in the last century, of the work of Richard of Cirencester ought to be viewed as any great benefit conferred on British archæology. The compilation of a monk of the fourteenth century, even as supplementary to the geographical details of Ptolemy, can hardly be received with too great caution, but used as it has been almost entirely to supersede the elder authority, it has in many instances, and especially

in relation to our northern Roman geography, proved a source of endless confusion and error. Without, however, aiming at reconstructing the Ptolemaic map of Caledonia, we have abundant evidence that various important Coloniæ were established, which have received no notice, either in Ptolemy's geography or the "De Situ Britanniæ" of the monk of Westminster, whom antiquaries may be pardoned suspecting to have assumed the cowl for the purpose of disguise, being in truth a monk not of the fourteenth but of the eighteenth century.[1] Attracted by the supposed correspondence of the triple heights of the Eildon Hills to the designation of Ptolemy's *Trimontium*, General Roy sought in their neighbourhood for the evidences of a Roman station, and though less successful than he desired, he found sufficient indications of the convergence of the great military roads towards this point, to induce him to conclude "that the ancient Trimontium of the Romans was situated somewhere near these three remarkable hills, at the village of Eildon, Old Melros, or perhaps about Newstead, where the Watling Street hath passed the Tweed."[2] Though the propriety of assuming this as the site of Trimontium is questioned, the sagacious conclusions as to a Roman site detected by the practical eye of General Roy, have since been amply confirmed by the discovery of undoubted traces of a Roman town at the base of the Eildon Hills. Stuart has engraved an altar dedicated to the forest deity Silvanus, by Carrius Domitianus, a centurion of the Twentieth Legion, which he describes as "a few years since discovered, not far from the village of Eildon."[3] As this discovery is of considerable value as a clue to the true site of this central Roman town within the province of Valentia, it is worthy of note that it was found on the 15th of January 1830, in digging a drain, about three feet below the surface, in a field called the Red Abbey Stead, near Newstead, a village to the north of Eildon, and directly east of Melrose.

More recently the Hawick Railway has been carried through the vale of Melrose, and in its progress has added further evidence of the presence of the Roman colonists on the site, while the ordinary course

[1] C. R. Smith, no mean authority on such a subject, defends the authenticity of Richard of Cirencester in his recent valuable work on "The Antiquities of Richborough, Reculver, and Lime," p. 177. The illustrations of our Northern *itinera* have led me to an opposite conclusion; but even should the genuineness of the "*De Situ Britanniæ*" be established, its value to Northern antiquaries must still be open to question.

[2] Roy's Military Antiquities, p. 116.

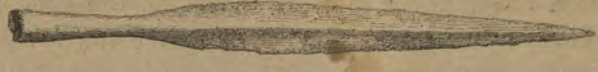
[3] Caledonia Romana, p. 150.

of agricultural operations has exposed numerous foundations of buildings, Roman medals and coins, and a regular causewayed road, undoubtedly the ancient Watling Street. This road was laid bare only a year or two before, in the progress of draining a field called the "Well Meadow," immediately to the west of the Red Abbey Stead. It was about twenty feet broad, and was entirely excavated by the tenant, in order to employ its materials for constructing a neighbouring fence. In the course of removing it the foundations of various houses were exposed, and a sculptured stone was discovered, considerably mutilated, but still bearing on it, in high relief, the wild boar, the well-known device of the Twentieth Legion. As this corresponds with the inscription on the altar previously discovered, there can be little question that the road-way and other military works of this important station, were executed by the same legion. Another sculptured portion of an inscribed tablet, found in the same field, evidently of Roman workmanship, retains only the fragmentary letters CVI. Among the numerous foundations of ancient buildings much Roman pottery has been dug up, including the fine red Samian ware, the black, and the coarser yellowish or grey fragments of mortaria and other common domestic utensils. It is not improbable, indeed, that the name of Red Abbey Stead has been conferred on the site of the Roman colonia, owing to the colour of the soil and the characteristics of the remains of ancient building so frequently exposed, arising from the presence of numerous fragments of Roman brick and pottery. By the same means the course of the Antonine Wall may frequently be traced in the new ploughed fields on its site, where all other indications have disappeared. There is no evidence of any abbey having ever existed on the site; but surrounded as the district is with Newstead and New and Old Melrose, the seats of ancient ecclesiastical establishments, the discovery of the brick foundations of extensive buildings would very naturally suggest the local name of the Red Abbey. It was in the immediate neighbourhood of this Roman site that one of those curious subterranean structures was discovered, which has been referred to in an earlier chapter.[1]

Towards the close of 1846, during the excavations for the Hawick branch of the North British Railway, several circular pits or shafts were laid open a little to the east of the village of Newstead, and nearly on the line of the Roman road, an additional portion of which

[1] *Ante*, p. 87.

was exposed by the railway-cutting. Two of these shafts were regularly built round the sides with stones, apparently gathered from the bed of the river, and measured each two feet six inches in diameter, and about twenty feet deep. The others greatly varied both in width and depth, and were filled with a black fetid matter, mixed with earth, and containing numerous fragments of pottery, oyster shells, antlers of the red deer, and bones and skulls of cattle, apparently the *Bos Longifrons*: the skulls being broken on the frontal bone as if with the blow of a pole-axe, or possibly of the sacrificial securis. A piece of a skull discovered in the same place seems to have been that of a small-sized horse. In one of the pits the skeleton of a man was found standing erect with a spear beside him, and accompanied with mortaria and other undoubted remains of Roman pottery. The spear-head,



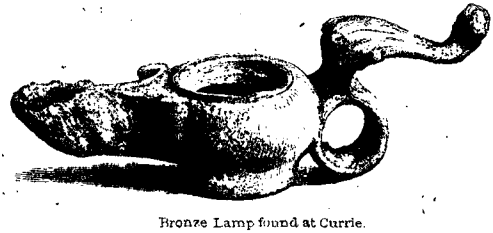
which measures fourteen inches in length, and only one and a quarter in greatest breadth of blade, is figured here.* The skull has been already described and compared with the crania of the Scottish tumuli in a previous chapter;[1] and the weapon represented here, as well as various mortaria, urns, coins, and other relics from the same locality, are now in the possession of John Miller, Esq., C.E., under whose direction the railway was constructed. A bronze kettle, lachrymatories, bricks, clay tubes, stones cut with the cable-pattern and the like familiar classic mouldings, and numerous other Roman remains, all attest the important character of the Roman town on this site. Coins from the same locality are also in the possession of Thomas Tod, Esq., of Drygrange, and Dr. J. A. Smith. In so far as these are to be received in evidence of the length of time during which the Eildon station was occupied, they extend over a longer period than we have any reason to believe the Roman colonists possessed the province of Valentia; including those of Vespasian, Domitian, Hadrian, Antoninus Pius, and Severus, as well as of Diocletian, Maximianus, Carausius, Constantius Chlorus, and Constantine. It is to be borne in remembrance, however, that among the Britons of that early period

[1] *Ante*, p. 171.—I am indebted for much of the information relative to the recent discoveries at Newstead, to the notes and personal observations of Dr. J. A. Smith,* and to John Miller, Esq., C.E., in whose possession the spear now is. The dimensions of the skull are given in the table of cranial measurements, p. 166, No. 16.

a coin was money whose ever image or superscription it bore, and doubtless the Roman mintage continued to circulate long after the last of the military colonists had abandoned the province of Valentia.

Directly to the north, on the line of the road discovered in the Well Meadow, there existed, in the memory of some few village patriarchs, the foundations of a bridge on the banks of the Tweed, which also may be assumed as the work of the Twentieth Legion. It appears to have attracted the notice of General Roy, as he speaks of the Watling Street having crossed the Tweed about Newstead. Continuing our course northward along this ascertained Roman route, we are once more left to the guidance of the recent interpreters of Ptolemy and the believers in Richard of Cirencester, though it is possible with the aid both of new and old evidence to fix another portion of the route which has heretofore been misplaced. The assigned old Roman Iter proceeds from Eildon to the supposed *Curio* or *Curia*, near Borthwick —a site still requiring confirmation—and thence directly to the Roman port of Cramond or Alaterva.

The southern shores of the *Bodotria Æstuarium*, or Frith of Forth, bear more abundant traces than almost any other Scottish district of continuous occupation by Roman colonists; doubtless owing, in part at least, to the frequent presence of the fleet in the neighbouring estuary. If Alaterva, to whose Deæ Matres one of its altars was dedicated, be indeed the ancient name of Cramond, no such epithet is to be found in the old itineraries, nor has a classic name been suggested for the no less important Roman town at Inveresk; unless that one zealous local antiquary[1] has recently conceived the possibility of establishing its claims to be the true Curia, hitherto located elsewhere on very slender and inconclusive evidence.



Bronze Lamp found at Currie.

Following the course of the assigned Roman route from the supposed *Curia* at Currie, near Borthwick, it is carried by Roy, in his revised map, by a westerly sweep towards Cramond, leaving the rocky heights of Edinburgh some two miles to the east of it, and joining

[1] D. M. Moir, (*Delta*,) in a communication to the Society of Antiquaries of Scotland.

Inveresk, in the maps of Chalmers and Stuart, by imaginary cross-roads, sufficiently satisfactory on paper. A totally different arrangement may, however, be shewn to have been followed in laying down the Roman military roads of this district. Earlier writers were not so ready to exclude the Scottish capital from Roman honours: *e.g.*,—"The town of Eaden," says Camden, "commonly called Edenborow, the same undoubtedly with Ptolemy's *Στρατοπεδον Πτερωτον, i.e.*, Castrum Alatum."[1] Sir Robert Sibbald was one of the first of our Scottish authors to place a Roman colonia at Edinburgh, but without advancing any satisfactory grounds for such a conclusion.[2] "Some," says he, "think Edinburgh the *Caer-Eden* mentioned in the ancient authors." Others, equally bent on maintaining the honour of the Scottish metropolis, found in it the Alauna of Ptolemy, and in the neighbouring Water of Leith the Alauna Fluvius—a discovery perhaps not unworthy to match with that of Richie Moniplies when he sneered down the Thames with ineffable contempt in comparison with the same favourite stream! Such arguments, like those for too many other Romano-Scottish sites, were mere theories, unsupported by evidence, and little more can be advanced in favour of the supposed *Castrum Alatum*.[3] Later writers on the Roman antiquities of Scotland have accordingly excluded Edinburgh from the list of classic localities. There are not wanting, however, satisfactory traces of Roman remains on the site of the Scottish capital, a due attention to which may help to furnish materials for a revised map of the Roman Iter.

There passes across the most ancient districts of Edinburgh, and skirting the line of its oldest fortifications, a road leading through the Pleasance,—so called from an old convent once dedicated to S. Maria de Placentia,—St. Mary's Wynd,—another conventual memorial, —Leith Wynd, St. Ninian's Row, Broughton, and Canonmills, right onward in the direction of the ancient port of Alaterva. Probably more than fourteen hundred years have elapsed since Curia and Alaterva were finally abandoned by their Roman occupants, and the dwellings of the Eildon colony were left to crumble into ruins; yet the traces of the Romans' footsteps have not been so utterly obliterated but that we can still recover them along the line of this old road, so deeply imprinted with the tread of later generations.

In the year 1782 a coin of the Emperor Vespasian was found in a

[1] Gough's Camden, vol. iii. p. 304.
[2] Sibbald's Historical Inquiry, p. 41.
[3] Itinerarium Septentrionale, Appendix pp. 180-183.

garden in the Pleasance, and presented by Dr. John Aitken to the Society of Antiquaries of Scotland,—the first recent recovery, so far as is known, of any indications of the Roman presence on the highway which it is now sought to retrace to a Roman origin. Much more conclusive evidence has, however, since been brought to light. In digging in St. Ninian's Row, on the west side of the Calton Hill, in 1815, for the foundations of the Regent Bridge, a quantity of fine red Samian ware, of the usual embossed character, was discovered. It was secured by Thomas Sivright, Esq. of Southhouse, and remained in his valuable collection of antiquities till the whole was sold and dispersed after his death.[1] In 1822, when enlarging the drain by which the old bed of the North Loch, at the base of Edinburgh Castle, is kept dry, portions of an ancient causeway were discovered fully four feet below the modern level of the road. Some evidence of its antiquity was furnished on the demolition, in 1845, of the Trinity Hospital, formerly part of the prebendal buildings of the collegiate foundation of Queen Mary of Gueldres, founded in 1462, when it was discovered that the foundations rested on part of the same ancient causeway;[2] and on the demolition of the venerable collegiate church an opportunity was afforded me of examining another portion of it above which the apsis of the choir and part of the north aisle had been founded. The conclusion which its appearance and construction immediately suggested, was that which further investigation so strongly confirms, that these various remains indicate the course of a Roman road. It was composed of irregular rounded stones, closely rammed together, and below them was a firm bed of forced soil coloured with fragments of brick, bearing a very close resemblance to the more southern portions of the same Roman military way recently exposed to view in the vale of Melrose. The portions of it discovered in 1822 included a branch extending a considerable way eastward along the North Back of Canongate, in a direct line towards the well-known Roman road in the neighbourhood of Edinburgh, popularly styled "The Fishwives' Causeway."[3] Here, therefore, we recover the traces of the Roman way in its course from Eildon to Alaterva, with

[1] I owe this information to Mr. A. Handyside Ritchie, the well-known sculptor, who examined the Roman ware while in Mr. Sivright's collection. Probably all record of its locality has been lost sight of by its new possessor, if indeed it has been preserved.

[2] In 1846 Mr. Brown presented to the Society of Antiquaries of Scotland "a stone ball, found at the Trinity Hospital, three feet below the surface, and upon a piece of causeway." Minutes of Society, 21st Dec. 1846.

[3] Memorials of Edin. vol. ii. p. 176.

a diverging road to the important town and harbour at Inveresk, shewing beyond doubt that Edinburgh had formed an intermediate link between these several Roman sites. The direction of the road, as still visible in the neighbourhood of Cramond in the early part of the eighteenth century, completely coincided with the additional portion of it thus recovered. "From this same station of Cramond," says Gordon, "runs a noble military way towards *Castrum Alatum*, or Edinburgh; but as it comes near that city, it is wholly levelled and lost among the ploughed lands."[1]

Within a few yards of the point where this ancient Roman road crosses the brow of the hill on which the ancient Scottish capital is built, are the beautiful bas-reliefs above referred to, the heads of the Emperor SEPTIMIUS SEVERUS and his wife JULIA. I have already suggested elsewhere[2] that these sculptures, which in Maitland's time, 1750, were said to have been removed from a house on the opposite side of the street, have probably been discovered in digging the foundations of that building. This idea has received striking confirmation during the present year, (1850.) In the progress of laying a new and larger set of pipes for conveying water to the palace of Holyrood, the whole line of the High Street has been opened up, the workmen in many places digging into natural soil, and even through the solid rock. In the immediate neighbourhood of the site of the old "Heart of Mid-Lothian," several coins were found, including one of Henry IV. of France, bearing the date 1596; and lower down the street, two silver denarii of the Emperor Septimius Severus were discovered, in good preservation, not many feet from the locality of the Roman sculptures. The reverse of the one represents a soldier armed, and bearing the figure of victory in his right hand—legend, AVGG · VICT., and of the other a female figure in flowing drapery, bearing in the right hand a wreath, and in the left a cornucopia—the legend illegible. The prejudices of a strong local partiality induce me to look upon these traces of Roman presence on a spot which formed the battle-ground of Scotland during the "Douglas Wars," as well as in older struggles, with an interest which I cannot hope to communicate to archæologists in general, but which to many of them may perhaps seem a pardonable excess. The visit of the Emperor Septimius Severus, and still more, of his Empress,[3] to this

[1] Itiner. Septent. p. 117.

[2] Memorials of Edinburgh, vol. ii. p. 50.

[3] "About this time it would appear that Julia, the wife of Severus, and the greatest

distant corner of the Roman world, were incidents of a sufficiently unusual occurrence to be commemorated by those who have left records of every few thousand paces of an earthen vallum which they erected. If we suppose the road which has been traced out in continuation of the Watling Street to have been the route by which the Emperor journeyed northward—as there is good probability that it must have been—we may imagine him pausing on the brow of the hill, just above the steep slope occupied by Leith Wynd, and catching the first view of the Bodotrian Frith, with the Roman galleys gliding along its shores, or urged with sail and oar towards the busy sea-port of Alaterva, now the humble fishing village of Cramond. On this spot it seems probable that some important memorial of this distinguished Emperor's visit had been erected, of which the beautiful sculptures still remaining there formed a prominent feature. Overthrown amid the wreck of Roman empire, they may have lain interred for many centuries; for within a very short distance of their present site, recent discoveries have brought to light medieval sculptures and remains of buildings many feet below the foundations of those of the sixteenth century.[1]

These, however, are not the sole evidences of the occupation of Edinburgh by the Romans. In the Reliquiæ Galeanæ, of date March 1742, Sir John Clerk thus describes "a Roman arch discovered at Edinborough,"—"Just about the time that your structure at York was pulled down, we had one at Edinborough which met with the same fate. It was an old arch that nobody ever imagined to be Roman, and yet it seems it was, by an urn discovered in it, with a good many silver coins, all of them common, except one of Faustina Minor, which I had not. It represents her bust on one side, and on the reverse a *lectisternium* with this inscription, SÆCULI FELICITAS."[2] It is much to be regretted that this information is not more precise, both about the other coins and the arch in which so remarkable a deposit was found. Such as it is, however, it is of great value. To these traces of the Roman presence there remain to be added the sculptured heads which formerly adorned the old Cross of Edinburgh, demolished in 1756, and described by Arnot as apparently of the Lower Empire—an opinion to be received with some doubt. In

part of the imperial family, were in the country of Caledonia; for Xephilin, from Dio, mentions a very remarkable occurrence which then happened to the Empress Julia and the wife of Argentocoxus, a Caledonian," &c.—Itiner. Septent. p. 104.

[1] Memorials of Edinburgh, vol. ii. p. 34.

[2] Biblio. Topog. Britan. vol. ii. p. 348.

digging the foundation of a large reservoir erecting on the Castle-hill, during the present season, among various very remarkable discoveries, to be afterwards noticed, there was found another relic of the Lower Empire, a single copper coin, in excellent preservation, struck under Constantine the Great.

Pennant describes in his Second Tour, "certain curiosities in a small but select private cabinet," found in the neighbourhood of Edinburgh, which had escaped his notice on his former visit. Notwithstanding their very great local value they have experienced the usual fate of private collections, and are no longer known. "Among other antiquities in the cabinet of Mr. John Macgouan, discovered near this city, is an elegant brass image of a beautiful Naiad, with a little satyr in one arm. On her head is a wine-vat or some such vessel, to denote her an attendant on Bacchus; and beneath one foot a subverted vase, expressive of her character as a nymph of the fountains." If this beautiful group still exists the description must render it easily identified. Other relics in the same private collection, and it may be assumed, from the connexion, included in Pennant's description as discovered in the neighbourhood of Edinburgh, are a bronze vessel with a perforated top, possibly designed for incense, and an iron scourge or *flagrum*, one of the dreadful instruments of torture used by the Romans, chiefly for the discipline of slaves, but afterwards employed in the persecutions of the primitive Christians. Lastly, it is not unworthy of note, in passing, that in the foundations of the ancient Chapel of St. Margaret, in the Castle, an early Romanesque work, there are bricks which may possibly be only fragments of medieval floor-tiles, but which more readily suggest the idea of their being traces of older Roman buildings, similar to those which remained in the contemporary Church of St. Michael at Inveresk, until its recent demolition, and are still recognised amid the later masonry of Dumbarton Castle, the THEODOSIA of Richard of Cirencester. Independently of this, however, evidence enough has, I think, been adduced to establish the fact that a Roman colonia existed on the site of Edinburgh. Yet it was not without reason that this was assumed as probable by older Scottish antiquaries in the absence of such proof, since the admirable military positions presented by the locality are too obvious to have escaped the practised eyes of the Roman engineers established on the neighbouring coast; especially as they had previously been occupied by the native

Britons, as is manifest by the discoveries of their cists and cinerary urns, as well as of their primitive weapons, in the immediate vicinity. Taking these latter arguments into consideration, the mere fact of the Roman roads from Newstead—and perhaps Curia—from Cramond and Inveresk, all meeting in the valley between the Calton and the Castle Hills, is of itself good presumptive evidence in favour of a Roman post having occupied the site.

It need not excite surprise that traces of Roman occupation should be found in localities unnoted in the pages of Ptolemy. We may rather wonder that history should furnish the amount of information it does regarding the brief presence of the legions in a country from which they returned with such dubious accounts of triumph. Among the Romano-British relics in the Museum of the Society of Antiquaries of Scotland, are a circular bronze ornament, an elegant foot of a bronze tripod in form of a horse's leg and hoof, and a small figure of Minerva on a pedestal of brass gilt, measuring nearly three inches high, all found at different times in East-Lothian. The last relic is not to be compared, however, to another bronze in the same collection, a figure of the goddess Pallas Armata, five inches in height, dug up in the neighbourhood of the Kirkintilloch station on the Roman wall, and presented to the Society in 1786. It is a beautiful work of art; but the most remarkable feature about it is the spear which the goddess holds in her hand, bearing an exact resemblance to the tilting-spear of the middle ages.

In the same collection are also preserved a bronze stamp, discovered near the village of Carrington, Mid-Lothian, bearing the inscription, which is reversed, in bold relief, TVLLIAE TACITAE; and a bronze key of undoubted Roman workmanship, found within a camp-kettle, in a moss near North-Berwick Law,—probably the same locality where a quantity of bronze vessels were recently dug up, as already described. In addition to these must be noted the exceedingly beautiful bronze lamp four and three-fifth inches in length, figured on a previous page, found along with a small and rudely

executed bronze eagle, at Currie, Mid-Lothian. These remarkable Roman relics will probably be considered sufficient to establish the fact, that the Roman road had passed through that line of country. They will add, however, only a very slight addition to the unsatisfactory evidence on which the last named place has been assumed to be the site of the Roman Curia—heretofore on little better authority than the correspondence between the ancient and modern names. Gordon describes another "most curious Roman lamp of brass, adorned with a variety of engravings," found at Castlecary.[1]

"As you very well notice," writes Sir John Clerk to his friend and correspondent Mr. Roger Gale, "Ptolemy mistook several Latin names when he rendered them into Greek. Of this kind, as I suspect, is his *Πτερωτον Στρατοπεδον, Castrum Alatum*, which our antiquarians have applied to Edinburgh. I rather believe that the place designed by Ptolemy is an old Roman station on the sea-coast, which we call Cramond, and that it was anciently called, not *Castra Alata* but *Alatervum*, or *Castra Alaterva*." To this Mr. Gale replies, with equally cogent arguments for restoring the Castra Alata to the winged heights of Edinburgh, on which we need not enter here, having already sufficiently discussed the question of the latter's claims as a Roman site. While, however, Edinburgh has undergone the ceaseless changes which centuries bring round to a densely populated locality, Cramond was in all probability abandoned to solitude, or at most occupied by a few fishermen's huts when deserted by its Roman founders. Hence the traces of its ancient colonists have been discovered in great abundance in recent times. An almost incredible number of coins and medals, in gold, silver, and bronze, have been found at different periods, of which Gordon mentions between forty and fifty of special note which he examined in Sir John Clerk's possession. Sibbald, Horsley, and Wood, all refer in similar terms to the valuable numismatic treasures gathered on this Roman site, including an almost unbroken series of imperial coins from Augustus to Diocletian; and thereby proving that the ancient Alaterva had not been abandoned to utter solitude on the retreat of Severus. Some rare and valuable medals have also been discovered among its ruins, including one of the Emperor Septimius Severus, inscribed on the reverse, FVNDATOR PACIS, and supposed to have been struck to give the character of a triumph to the doubtful peace effected by

[1] Itiner. Septent. p. 57.

him with the Caledonians.[1] Three altars have been found at Cramond; one sacred to Jove, one to the Deæ Matres of Alaterva, and the third, figured by Horsley, and assigned by him, as well as by later writers, to the favourite forest deity Silvanus. The obvious resemblance, however, of the sculpture on the last altar to an Anglo-Roman mosaic, now in the British Museum, representing the sea-god Neptune with horns of lobster's claws, and dolphins proceeding from his mouth, leaves little room for doubt that the colonists of the chief Roman port on the Bodotrian Frith had more appropriately dedicated their altar to the ruler of the waves.[2] The large altar found at Cramond, dedicated to the Supreme Jove, formerly in the Advocates' Library, and now deposited in the Scottish Antiquarian Museum, has been frequently engraved. It is thus inscribed,—

I O M
COH · V · GALL ·
CVI · PRÆEST
IMINE · HONVIS
TERTVLLVS
PRAEF · V · SL
L · M

Its well-known inscription is repeated here, in order to associate it with another relic found at Cramond, probably prior to the discovery of this altar, which attests the presence of the same Roman Prefect, Imineus Honorius Tertullus, at the station of Alaterva. Among the numerous Roman remains acquired by Sir John Clerk from this interesting locality, and now preserved at Penicuick House, is a bronze stamp, measuring two and three-eighths by one and a half inches. It is surmounted by a crescent, and bears the words, in raised letters of half an inch in height, TERTVLL. PROVINC. The inscription is reversed, having evidently been designed for use as a stamp, and on the back is a ring handle in form of a bay leaf. A centurial inscription of the Second Legion, Augusta, a sculptured figure of the imperial eagle grasping the lightning in its talons, with numerous carved stones, bricks, flue-tiles, and pottery, have from time to time been recovered on the same Roman site. To these may be added another inscription, derived from the Morton MS., presented in 1827 to the Society of Antiquaries of Scotland, by Susan, Countess-Dowager of Morton.

[1] Sibbald, p. 83; Itiner. Septent. p. 117; Horsley, p. 205; Wood's Cramond, p. 4; Caledon. Romana, p. 163.

[2] Archæologia, vol. xviii. p. 120.

It is indorsed, "Ancient inscriptions on stones found in Scotland," and is supposed to have been written by James, Earl of Morton, president of the Royal Society, who died in 1786. Some of the inscriptions appear to have been derived from Camden and other well-known authorities; but others, including the following imperfect relic, are probably nowhere else preserved. Even in its extremely mutilated and fragmentary state, it is, perhaps, not altogether unworthy of preservation. It is thus described,—"This inscription is on a stone on the east end of the church of Cramond, in West-Lothian, [*Mid-Lothian*,] being three foot long, and one foot and a half broad, having four lyons drawn on it, all being almost worn out,"

. . . . G PVBLIVS CR . . .
. . . IN POMPONIAN . . .
. . . . . .
. PAT · P · D · D . . . .

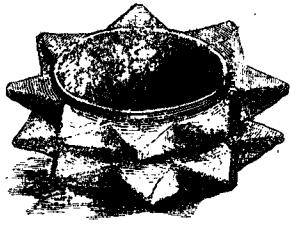
This inscription escaped the notice of Wood when preparing his history of the parish, or was perhaps thought to be too imperfect to be worth recording, and it now no longer exists.

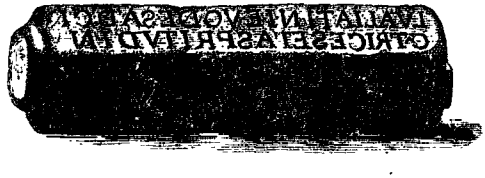
Another Scottish stream bearing the name of the Almond forms a tributary of the Tay, and is also associated, by the remarkable discoveries on its banks, with the memory of the legionary invaders. A Roman camp, once in good preservation, has been nearly obliterated by the encroachment of the stream on its banks; but the changes which destroyed its entrenchments have brought to light still more satisfactory traces of their constructors. The most interesting of these is a bar of lead of 73 lbs. weight, marked thus—(⋈ J XXXX, beside which lay the remains of a helmet and spear, nearly consumed by rust. Another stamped pig of lead was found at Kirkintilloch, on the line of the wall; and examples from various English localities, inscribed with the names and titles of Roman Emperors, are preserved in the British Museum, and in private collections. One of these, marked IMP . ADRIANI . AVG, supplies a new argument relative to ancient British metallurgy. It was found near the lead mines of Mr. More of Linley Hall, county Salop, where an old drift, distinguished from those of modern date by various evidences of imperfect mining, is still designated the Roman Vein. Ancient mining tools have been found in it, and Sir R. I. Murchison states his opinion that the block of lead is the product of the neighbouring British mine.[1] Another pig of lead, with

[1] Silurian System, p. 279.

its Roman inscription partially defaced by oxidation, was recently dug up at Chester, and is figured in the Journal of the Archæological Association,[1] along with one found at Broughton Brook, Hants, and still preserved at Bossington Park. The latter is inscribed NERONIS . AVG . EX . KIAN . IIII . COS . BRIT., and supplies a remarkably interesting example of the historical value frequently pertaining to such relics. The inscription refers to the Cangi or Kiangi, immediately prior to the reverses experienced by the Romans from the courage and skill of the heroic Boadicea. The precise date is furnished, Nero having been consul for the fourth time only the year before; and it is suggested, with great probability, that this block of lead was on its way for exportation, composing part of the tribute, the harsh exaction of which contributed to incite the Britons to resistance.

Among minuter relics belonging to the same period, the dentated bronze ring figured here, from the original in the Museum of the Scottish Antiquaries, is worthy of some note from the rarity of such objects in Britain. It was discovered near Merlsford, on the river Eden, Fifeshire, and closely corresponds to another example found in Suffolk, and figured in the Archæological Journal, where it is remarked that objects of this kind are frequently met with in Continental collections, but have rarely, if ever, been found in this country.[2] They occur with one, two, and three rows of teeth. Sir Samuel Meyrick describes them as dentated rings, the form apparently suggested by the *Murex* shell, and supposes them to have been attached to the whirling arm of a military flail.



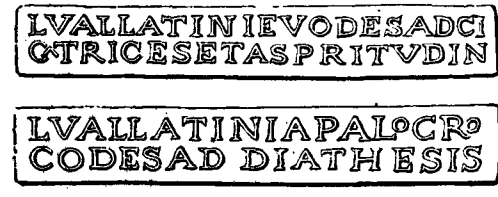


But by far the most remarkable of the recently discovered remains of the Roman occupants of Scotland is a medicine stamp, acquired by the Society of Antiquaries of Scotland, along with a very valuable collection of antiquities, bequeathed to them by E. W. A. Drummond Hay, Esq., formerly one of the secretaries of the Society. From his notes it appears that it was found in the immediate vicinity

[1] Archæol. Journal, vol. v. p. 226.

[2] Archæol. Journal, vol. vi. p. 181.

of Tranent Church, East-Lothian, in a quantity of debris, broken tiles, and brick-dust, which may not improbably have once formed the residence and laboratory of Lucius Vallatinus, the Roman oculist, whose name this curious relic supplies. It consists of a small cube of pale green stone, two and three-fifth inches in length, and engraved on two sides as in the annexed wood-cut; the letters being reversed for the purpose of stamping the unguents or other medicaments retailed by its original possessor.



The inscriptions admit of being extended thus on the one side: L. VALLATINI EVODES AD CICATRICES ET ASPRITUDINES, which may be rendered—The evodes of Lucius Vallatinus for cicatrices and granulations. The reverse, though in part somewhat more obscure, reads: L. VALLATINI A PALo CROCODES AD DIATHESES—The crocodes, or preparation of saffron, of L. Vallatinus of the Palatine School, (?) for affections of the eyes.[1] Both the Euodes and the Crocodes are prescriptions given by Galen, and occur on other medicine stamps. Several examples have been found in England, and many in France and Germany, supplying the names of their owners and the terms of their preparations. Many of the latter indicate their chief use for diseases of the eye, and hence they have most commonly received the name of Roman oculists' stamps. No example, however, except the one figured here, has ever occurred in Scotland; and amid legionary inscriptions, military votive altars, and sepulchral tablets, it is peculiarly interesting to stumble on this intelligent memento, restoring to us the name of the old Roman physician who ministered to the colonists of the Lothians the skill, and perchance also the charlatanry, of the healing art.

A remarkable gold relic of a semicircular form was found in 1787 in a moss on the borders of Moffat parish, Annandale, near the track of the Roman way. It measured from three to four inches in length, but was evidently imperfect, and had on the exterior edge an orna-

[1] A PALo may either refer to the school of the Mediciner, and signify *of Palermo, Palatino*, or the like; or, as is perhaps more probable, it is the *Crocodes of Palermo*, or elsewhere. Between sixty and seventy of these medicine stamps are now known, and two specimens of pottery have been found in France impressed with similar prescriptions,—evidently the vessels in which the preparations were preserved.

mental raised rim, inscribed in characters perforated through the gold : IOVI . AVG . VOT . XX. An exceedingly beautiful bronze flagon, twelve inches in height, plated with gold, and of undoubted Roman workmanship, discovered in the bottom of a small burn, on the edge of an extensive moss, in the parish of Lesmahagow, Lanarkshire, is now in the Hunterian Museum, and has been engraved in the Archæologia.[1] A pair of patellæ, found near Frier's Carse, Dumfriesshire, in 1790, one of them inscribed on the handle ANSIEPHARR, are also engraved and described in the Archæologia.[2] Two others are noticed by Ure, which were found in a chambered tumulus, in the parish of Rutherglen, and stamped with the name of CONGALLUS. The handle of another of the same type, the name on which is too indistinct to be deciphered, was found at a depth of five feet in the Moss of Ballat, Stirlingshire, in 1849, and is now in the Museum of the Scottish Antiquaries. In addition to these, among the MSS. in the library of the Society, is a sketch of what appears to be justly described as "one of the most elegant Roman cups ever discovered in Britain, of the finest Corinthian brass, beautifully embellished with a dance of the Bacchantæ in the centre, a wreath of vine leaves tastefully encircling the neck in *alto relievo*, the whole highly finished. It was found about nine feet under the surface of Lochar Moss, Dumfriesshire, and long preserved in the family of a gentleman in that county, but has now been lost sight of for some years." The drawing, which is by Mr. W. S. Irvine, was forwarded to the Society through the present Sir David Brewster in 1815, along with sketches of Roman altars and other antiquities, and proposals for publishing a work on the antiquities of what the author calls *Regnum Cambrense*. The drawings are slight, and sadly out of perspective, but they furnish some interesting materials relative to the Scottish Roman invasion, which have escaped the notice of Stuart—the only writer who has treated of the subject since their discovery. The vessel above described is an exceedingly beautiful vase, with floriated handles, curving up into birds' heads where they are attached at the lower ends to the vase. Its dimensions are not given, and the sketch is unfortunately too imperfect to be engraved.

Apart from the stations on the Antonine Wall and the fertile regions of the Lothians, no district of Scotland has been so fruitful in remains of Roman art and military skill as the country of the Selgovæ,

[1] Vol. xvi. Plate LI. [2] Vol. xi. p. 105.

and especially Birrens, the supposed BLATUM BULGIUM of Antoninus. To the materials for the Scoto-Roman history of this province I am fortunately able to make additions from various sources. The following tablet, thus oddly located in the Morton MS., belongs to the district of the Selgovæ,—"This inscription is in a house of Jockie Graham's in Eskdale, fixed in a wall, set up, as appears by the Legio Augusta Secunda, in memorial of the Emperor Hadrian;"

IMP · CÆS · TRA · HAD
RIANO · AVG ·
LEG II · AVG · F ·

The successor of Trajan, we know, visited our island soon after his accession to the purple, but he was hastily summoned away to quell an insurrection at another extremity of his unwieldy empire on the banks of the Nile, and was glad to abandon the line where Agricola had reared his forts for that finally adopted by Septimius Severus as the northern limit of imperial sway. Camden mentions an inscription, the counterpart of this, dug up at Netherby,[1] and Pennant describes another nearly similar, (possibly indeed the Eskdale tablet,) which he examined among the antiquities at Hoddam Castle, Dumfriesshire.[2] All the inscriptions, however, transcribed by the latter at Hoddam Castle, are understood, where not otherwise specified, to be from the neighbouring station of Birrens, in which case the Eskdale tablet forms an important addition to the traces of the Roman Emperor's presence in Scotland. It is curious that neither Pennant, nor Stuart in his more elaborate Caledonia Romana,[3] makes any comment on the singular discovery of a legionary dedication to the elder Emperor Hadrian, found thus far within the transmural province of Valentia. The legionary tablets of the Scottish Wall are its most interesting relics. Notwithstanding the very great number of altars and other Anglo-Roman inscriptions found along the line of the southern wall, only two or three have borne the name of either of the Emperors by whom it was erected, and none of them exactly correspond to the Scottish legionary stones. So rare indeed are memorials of Septimius Severus, even in the south, that Gordon characterizes the discovery by Roger Gale of one bearing the name of that Emperor, in the foundation of Hexham Church, Northumberland, as "a very precious jewel of antiquity."[4]

[1] Camden, p. 834.
[2] Pennant's Tour, vol. iii. p. 411.
[3] Caledonia Romana, p. 129.
[4] Itiner. Septent. p. 84.

Leaving Eskdale for Annandale, we find ourselves within the interesting locality which includes both the stations of Birrens and Birrenswork Hill. Here have been discovered hypocausti, granaries, altars; a ruined temple, with the full figure, as is supposed, of the goddess Brigantia, inscribed with the name of AMANDUS the architect, who erected it in obedience to Imperial commands; the pedestal and torso of a colossal statue of the god Mercury; a mutilated statue of Fortune; the fruit of a vow in gratitude for restored health, performed by a Prefect of one of the Tungrian cohorts; a sepulchral tablet, dedicated by her mother to the shade of Pervica, a Roman maiden who faded under our bleak northern skies; with numerous other evidences of an important Roman colonia. A few of the Birrens inscriptions and other antiquities belong to the earlier years of the Roman presence in Scotland, but the greater number appear to be clearly referrible to the later era of the province of Valentia, subsequent to the retreat of the Emperor Septimius Severus. This is proved by the debased style of art which stamps nearly all the provincial Roman works of the third and fourth centuries. Confining any detailed accounts, however, to such relics as have not been previously described: in 1810 a beautiful altar, dedicated to Minerva, was dug up at Birrens by Mr. Clow of Laud, and is described in Mr. W. S. Irvine's MS. as serving (in 1815) as the pedestal to a sun-dial in the garden of George Irving, Esq., at his seat of Burnfoot, near Ecclefechan. It measures fifty inches in height by twenty-two inches in breadth, and about nine inches in thickness, the back being as usual roughly cut for standing against the wall. It presents an unusual display of ornament, being decorated with vine leaves, birds, fishes, and various architectural details. The inscription, which is in the highest state of preservation, is—

DEAE
MINERVAE
COH II TVN
GRORVM
MIL EQ C L
CVI PRÆEST CS L
AVSPEX PRÆF

which may be rendered: DEÆ MINERVÆ, COHORTIS SECUNDÆ TUNGRORUM, MILITIA EQUESTRIS CONSTANTINI LEGIONIS, CUI PRÆEST CAIUS LUCIUS AUSPEX PRÆFECTUS. This altar remained a few years since, and I believe still exists, as here described. But it is no solitary addition to the relics of

this second cohort of the Tungrians, whose memorials are even more abundant than those of the Second Legion, Augusta, on the wall of Antoninus. The Tungrians were among the first Roman legions to enter Scotland, and appear to have been long stationed at Blatum Bulgium. It was indeed to two Tungrian and three Batavian cohorts that Agricola was principally indebted for his victory over Galgacus. The valuable collection of Charles Kirkpatrick Sharp, Esq., includes three other altars, found about the year 1812 at Birrens, all of them the fruits of pious vows by the same Tungrian cohort. The largest of these is a beautiful altar, in the very finest state of preservation, of which the woodcut conveys a good idea. It measures fifty-five and a half inches in height by thirty inches in greatest breadth at top, and twenty and a quarter inches across the inscribed front. The inscription may be thus rendered: MARTI ET VICTORIÆ AUGUSTÆ CENTURIÆ TIRONUM MILITUM IN COHORTE SECUNDA TUNGRORUM, CUI PRÆEST SILVIUS AUSPEX, PRÆFECTUS. VOTUM SOLVERUNT LUBENTES MERITO.

The second of these altars found at Birrens is a small but neat one, measuring thirty-six inches high, by fourteen and five-eighth inches in greatest breadth, thus inscribed :—

DIB · DE
AB · Q
OMNB
FRVMENT
IVS MIL C°H II
TVNGR ·

It may be read: DIIS DEABUSQUE OMNIBUS FRUMENTIUS MILES COHORTIS SECUNDÆ TUNGRORUM. The third altar, which is of simpler and ruder workmanship, measures forty-three and three-quarter inches in height, by twenty-three and three-quarter inches in greatest breadth. It appears to be dedicated by Pagus Vellaus to one of those obscure local deities, apparently provincial names with Latin terminations, which are more familiar than intelligible to the antiquary. It belongs to a class of Romano-British relics peculiarly interesting, notwithstand-

ing the obscurity of their dedications, as the transition-link between the Roman and British mythology. These altars of the adopted native deities are generally rude and inferior in design, as if indicative of their having their origin in the piety of some provincial legionary subaltern. In the obscure gods and goddesses thus commemorated, we most probably recognise the names of favourite local divinities of the Romanized Britons, originating for the most part from the adoption into the tolerant Pantheon of Rome of the older objects of native superstitious reverence. Another altar found at Birrens is sacred to the goddess Harimella; but the most comprehensive, as well, perhaps, as the most interesting inscription of the whole class, is that on one of the altars of Marcus Cocceius Firmus, found at Auchindavy, and dedicated GENIO TERRAE BRITANNICAE. With the exception of the name, which adds a new one to our list of local divinities, the inscription on the altar now referred to presents no unwonted difficulties. It pertains, like the other Birrens altars, to the second Tungrian cohort, and is thus inscribed:—

DEAE RICAGM
BEDAE PAGVS
VELLAVS MILIT
COH II TVNG
V S L M

Besides these interesting memorials of the Tungrians, Mr. Sharp possesses a fourth altar from the same locality, which, though seen by Pennant at Hoddam Castle, has been so inaccurately transcribed by him, that it deserves a place among the unnoted Roman remains. The inaccuracies, though great literally, are not of very essential importance, except in the name assumed by the cohort, which he renders NERVIORUM MILLE. It measures forty-eight inches in height, by twenty-two and three-eighth inches in breadth at top, and is thus dedicated to the fickle goddess:—

FORTVNAE
COH I
NERVANA
GERMANOR
EQ

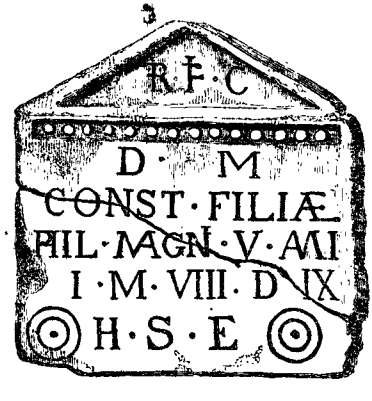
By means of the Irvine MS. in the Scottish Antiquaries' Library, another altar pertaining to the same cohort is recovered, dedicated to the Father of Olympus. It is a plain squared stone, measuring four feet in height, two feet in breadth, and thirteen inches in thickness,

without any ornament or moulding to relieve its bald form. It is stated by Mr. Irvine to have been taken out of the heart of the wall of the old church at Hoddam, when demolished, in 1815. The inscription is complete, and clearly legible; the mark ∞ is by no means of rare occurrence, signifying a thousand. Several of the letters in this, as well as in some of the previous examples, are joined for the purpose of abbreviation, but without affecting the reading.

I O M
COH · I · NERVANA
GERMANOR · ∞ · EQ
CVI PRAEEST L FANI
·VS FELIX TRIB

To these altars there only remains to be added another dedicated to Jove, derived from the same MS. It was dug up in 1814, in what Mr. Irvine describes as a small vicinal camp on the banks of the Kirtle, near Springkell, the elegant mansion of Sir J. H. Maxwell, Bart. It is of simple form, being relieved only by a small moulding a little way from the top. But the thuribulum is very carefully executed, and on the right side is a præfericulum sculptured in relief. The inscription is slightly mutilated: I . O . M . . . . NINVS . . I FECIT . P P.

But besides these relics of Pagan worship, another sepulchral tablet preserves a contemporary memorial of fraternal affection such as pertains exclusively to no creed or time. It is figured on a note of Mr. Irvine's, which appears to have accompanied the drawing of the altar of Minerva, found at Birrens, and may therefore be presumed, like that dedicated to the shade of Pervica, to have formed another of the numerous Roman remains which attest the importance of the station of Blatum Bulgium. It is thus dedicated to the manes of Constantia, the infant daughter of Philus Magnius,



who died at the age of one year, eight months, and nine days,—apparently by her brother: assuming that the letters on the pediment should be read, Frater fieri curavit.

These examples, while they serve to illustrate the traces of the Roman invasion which are found in Scotland, furnish additional ma-

terials for its history. The circumstances under which some of them have been discovered, and the fact that so many unedited inscriptions should remain to be described, after the very recent researches of the author of the Caledonia Romana, may suffice to shew how many more such relics must have disappeared from time to time, without an opportunity being afforded to the archæologist of noting their pregnant records.

To these may be added the following meagre list of Potters' Stamps, —all that I have been able to recover pertaining to Roman Scotland. This, however, arises from no paucity of materials. Mr. C. K. Sharp informs me that in his early years he remembers to have seen large accumulations of broken Samian ware and other Roman pottery dug up at Birrenswork. The same is also known to have occurred both at Inveresk and Cramond; and during the progress of construction of the Edinburgh and Glasgow Railway in 1841, a mass of debris about twelve feet deep was cut through on the site of the Castlecary Fort, which led to the exposure of a quantity of broken pottery, including some very fine fragments of embossed Samian ware, now in the possession of the Earl of Zetland, the owner of the ground. Had the person entrusted by the noble proprietor to take care of any relics that might be discovered, been sufficiently aware of the interest now attached to the potters' stamps, a large addition to the Scottish list would probably have been the result. As it was, however, he only served effectually to prevent this being accomplished. My friend, Mr. John Buchanan, a zealous Scottish antiquary, who visited Castlecary for the purpose, was prohibited from touching anything within the charmed circle; and, accordingly, these evidences of Roman art are mostly buried below the railway embankment, for rediscovery by other generations, when railway viaducts shall be as obsolete relics as Roman vallums now are. Within the area of the station a neatly cut centurial inscription was discovered, and is now preserved by the Earl of Zetland. It bears the inscription,—COHORTIS SEXTÆ CENTURIA ANTONII ARATI, thus abbreviated:

CHO VI
O ANTO
ARATI.

It is only very recently, even in England, that the names of the potters stamped on Roman fictile ware, have attracted much attention or been carefully recorded. Through the exertions of Mr. Charles Roach Smith and other zealous archæologists, we are now in posses-

sion of ample means for comparing new discoveries with the potters' stamps of London, Colchester, and York; but no collection of Scoto-Roman pottery exists, so far as I am aware, with the exception of the few specimens in the Museum of Scottish Antiquaries. The following *apology* for a Scottish list must therefore meanwhile suffice. It may perhaps form the nucleus of a more ample one at a subsequent period, by which to enable us to test the question of native or foreign manufacture, and to trace out the sources from whence the Roman colonists of Britain imported their finer fictile wares. The Scottish Museum furnishes a few curious specimens from Castlecary, some of which are given here in fac-simile. The first occurs on fine black ware, and looks like the imperfect attempt of some native or provincial potter to imitate a Roman stamp which he probably could not read. The second and third may be most fitly described as cuneiform. The larger of the two is on thin unglazed red ware. The fourth is on a patera of fine glazed Samian ware, and furnishes a good example of the mode of joining the letters together, with which English antiquaries are familiar, not only on the pottery, but also on the altars and inscribed tablets of the Anglo-Roman period. All these impressions are clear and distinct, so that their peculiarities are designed. Two of the other Castlecary stamps are furnished me by Mr. Buchanan, and the remainder are in my own possession, having been picked up in the neighbourhood of the railway embankment since its completion. For those from Newstead I am chiefly indebted to Dr. J. A. Smith.

Castlecary.

PATIRATI OF	SACIRAPO
VNFO IO (?)[1]	AESTIV M
IAIV	PRISCVS F
LIBER IM	A · I · BIN · I · M
IRSECA	AHIM
WILIIVI	[AEST][V]M

Falkirk—On a Terra Cotta Lamp.

MARCI

Birrens.

SAC · EROR

Duntocher.

BRVSC F[2]

Cramond.

CARVS F
ADIECTI
OF VAL°
OF IVCVN

Newstead, near Eildon.

W · SEC · V · F · O
DVRIVS · F
OXMII
RVRFI · MA
OIVSCI[2]
CIVs[2]
M · I · M[1]

[1] Amphoræ.

[2] Mortaria.

A handle of a Scoto-Roman amphora in the Museum of the Scottish Antiquaries, the exact locality of the discovery of which is unknown, is stamped with the letters M . P . F. The Roman fictilia in the same collection also include terra cotta lamps from several Scottish localities. One of singular type, in the form of a broad leaf, with the veins strongly marked in relief, was found at Chester Knowes, near Chirnside, Berwickshire, the site as is believed of a temporary camp. Another is from Castlecary, and a third from Birrens. Besides these, various urns, lachrymatories, fragments of mortaria, amphoræ, and Samian, and other wares, all suffice to shew the correspondence of the Roman fictile ware of Scotland and England.

Such are some of the traces of the Roman occupation of Scotland. If we believe the direct statements of the few classic historians who have thought our northern region worthy of notice, the natives were in a state of extreme degradation and barbarism. Yet from the same authors we are able to discover that these barbarians fought in chariots, were armed with swords, lances, bucklers, and poniards, and were capable of offering the most formidable resistance to the veteran legions. Still more, we find that the Caledonians never settled down either in contented peace or in passive despair under the Roman yoke. Experience of the legions did not intimidate them; and at length Septimius Severus, one of the ablest of the Roman emperors, was compelled to employ the arts of the diplomatist rather than of the soldier ere he abandoned them once more to their wild freedom. We may indeed question if this remote region could be worth the labour of conquest; but when once occupied we see in the remains of Roman works abundant reasons why the conquerors should wish to retain it. Our chief inquiry however is, to what extent did this brief and partial Roman occupation affect the native manners and arts? The answer, I think, must be, that its influence was slight, partial, and transitory. Like an unwonted tide, the flood of Roman invasion swept beyond its natural limits, disturbing and unsettling many things long unaffected by change. But the tide ebbed as rapidly as it had flowed, and at most only helped to prepare the soil for a new growth. Neither the manners, the faith, nor the social habits of these foreign occupants of the country could be at all acceptable to the natives, though their superior arts and military skill would not fail to be appreciated, and must have been turned to good account. As, however, we have traced earlier arts and discoveries passing onward from the south to the tribes of the north, and effectually revolutionizing all their pri-

mitive habits: so, too, the increasing civilisation of the Anglo-Roman provinces must have extended its fruits beyond the wall of Severus, and effected a more immediate and rapid change than the influence of the same Roman civilisation is seen to have done on Ireland or Denmark, where no legionary invaders ever constructed their intrenchments or established their colonies.

By far the most remarkable native structure which appears to be traceable to the influence and example of Roman arts is the "Deil's Dike," a vast rampart of earth and stone strengthened by a fosse, which passes across many miles of country, through Galloway and Nithsdale. This singular British vallum has excited much less attention than its magnitude and great extent seem to demand. It has been traced through a much larger district of country than the whole length of the Antonine Wall; and though it lacks the historic interest of that structure, and the valuable legionary inscriptions found along its line, it is nevertheless a remarkable evidence of combined action and primitive engineering skill. Mr. Joseph Train remarks of it,—"As it passes from Torregan to Dranandow, it runs through a bog, and is only perceptible by the heather growing long and close on the top of it; whereas, on each side the soil only produces rushes and moss. Near the centre of the bog I caused the peat to be cleared away close to the dike, and thereby found the foundation to be several feet below the surface, which appeared to me a sure indication of its great antiquity." This ancient wall measures eight feet broad at the base, and is mostly built of rough unhewn blocks of moorstone or trap. In districts where stone is more inaccessible it is constructed of stones mixed with earth and clay, and at some few points it is entirely of earth. It has been strengthened at intervals with fortified stations, like the Roman walls from which its model is supposed to be derived. One of these, on the height above Glendochart, is a circular fort 190 yards in diameter. Another fort is situated on a well-chosen, commanding height, called the Hill of Ochiltree, on the east side of Loch Maberrie. The fosse, which is still traceable along a great part of the wall, is on its north side, from whence we are justified in inferring that the vallum was reared by the natives of the southern districts. It is, of course, impossible to assign the age or the builders of this ancient structure with absolute certainty. History is utterly silent on the subject; and it is a fact well worthy of note, in reference to previous remarks on the possibility of many noteworthy deeds having passed unchronicled to oblivion, that everything connected

with this defensive erection is involved in the darkest obscurity. The very name which ascribes its origin to the Master Fiend shews how completely tradition has lost every clue to its builders. Yet the civilisation which led to such combined exertion as was needed both for the erection and defence of such an extent of wall must have been considerable. History has doubtless burdened itself with the charge of many meaner themes. The correspondence of the general design to the two Roman walls seems very clearly to point to its erection by the southern Britons after the departure of the Romans, when we know that they frequently suffered from inroads of the northern tribes. The circular forts along the line of the Deil's Dike also furnish a curious link connecting it at once with the older Roman and native military works, while they present a striking contrast to the camps and wall stations of the Roman legionaries.

Cæsar refers to the Britons in his time as using imported bronze. But he had no personal knowledge of the south-western districts of England, where copper and tin had been wrought for ages prior to the Roman invasion. Whether iron was manufactured in Britain before the Roman Invasion it is now perhaps impossible to ascertain, but the familiarity of the Romans with the mineral wealth of England at an early period gives some probability to the supposition that they found native workings of iron and lead as well as of tin and copper. Tacitus refers in general terms to the metallic wealth of Britain; Pliny alludes to the smelting of iron; and Solinus speaks of its use in the manufacture of weapons and agricultural implements. But whether the Romans originated, or only followed up the native workings, in mining for lead and iron, it is unquestionable that they gave a new impetus to the application of the metals to economic purposes. Roman pottery and glass, coins of Nero, Vespasian, and Diocletian, and other undoubted evidences of a Roman origin, have been discovered among the accumulated beds of scoriæ and other refuse of ancient forges in Sussex. Similar traces of iron-foundries accompanied with Roman coins have been observed near the wall of Hadrian, in Yorkshire and other counties. Two altars found at different times, the last at Benwell, in Northumberland, dedicated to Jupiter Dolichenus, the protector of iron-works, add still further evidence of the extent to which this useful metal was wrought during the Anglo-Roman period.[1]

[1] M. A. Lower on the Manufacture of Iron in Britain by the Romans. Journal of the Archæological Association, vol. iv. p. 265.

The forest of Dean also is familiar to English archæologists for its extensive mines and shafts, its beds of scoriæ, and other remains of ancient forges, among which have been found unquestionable traces of the Roman presence. Similar works are not to be looked for in Scotland, where no indisputable traces have yet been detected even of the working of the superficial clay. Many remains of ancient forges are, however, known in various districts both to the north and south of the Antonine Wall, though generally unaccompanied by relics which can enable us to assign them unhesitatingly to any precise period. The traces of an extensive iron forge are still obvious on the "Fir Isle," a peninsular promontory on the Carlinwark Loch, Kirkcudbrightshire, a locality peculiarly rich in its stores of archæological relics, including even the rude primitive canoes and other records of the primeval era. During the construction of the great military road through the same district, a large mound was levelled at a place called "Buchan's Croft, near the three thorns of the Carlinwark," which proved to be a mass of scoriæ and cinders, such as are generally left from a forge. This the ancient traditions of Galloway assign to a comparatively recent date, marking it as the spot where the famed Scottish cannon Mons Meg was manufactured in the fifteenth century.[1] Similar remains in the Roman districts of Lanarkshire are unhesitatingly attributed, in the Old Statistical Account of the parish of Dalziel, to operations of the Roman colonists:—"The great Roman highway, commonly called Watling Street, went along the summit of this parish from east to west, but its course is now much defaced by modern improvements. In one place, however, near the centre of that parish, it has been preserved entire, so as to point out the line to after times; the cross stone, the emblem of the baron's jurisdiction, being placed upon it, and that fenced by a large clump of trees planted around. At this place lies a large heap of the cinders of the Roman forges still untouched."[2]

In many of the uncultivated districts of Scotland iron ore occurs in the forms already noted as the most easily adapted for conversion into metal; and it is by no means improbable that such sources may have supplied it to the Celtic metallurgists, long before they had learned the difficult processes requisite for converting the native ironstone into metal. Whencesoever the art was derived, numerous

[1] New Statistical Account, vol. iv., Kirkcudbrightshire, p. 159.

[2] Sinclair's Statistical Account, vol. iii. p. 458.

Highland traditions and even the names of particular localities point to the excellency of the ancient Celtic smiths. In Blair-Atholl, for example, a district abounding with cairns and other primitive memorials, is *Dail-na-Cardoch*—the dale of the smith's shop, or rather of the iron work; and *Dail-na-mein*—the dale of the mineral. "Near these," says the old Statist of the parish of Blair-Atholl, "and along the side of the hill, down to Blair, are still to be seen the holes wherein they smelted the iron ore." Similar pits scattered over the northern moors are described as the kilns in which peats were charred for smelting. "There is still to be seen in Glenturret," says Logan in his Scottish Gael, "a shieling called Renna Cardick—the smith's dwelling—with the ruins of houses, heaps of ashes, and other indications of an iron manufactory. Old poems mention it as a work where the metal, of which swords and other arms were made some miles lower down the valley, was prepared. In Sutherland also are distinct marks of the smelting and working of iron with fires of wood."[1] In Islay is still shewn the spot where stood the forge of its once celebrated smiths, and the rocks from

Iron Forge Tongs.

whence the iron was dug which they fabricated into the renowned "Lann-Ila," or Islay blades.[2] In the *Sean Dana le Oisian* also occurs the elaborated poetic description of the ancient bow and quiver, concluding *'S ceann o'n cheard Mac Pheidearain; i.e.*, and the head of the arrow from the smith MacPhedran. Among the curious relics preserved in the Museum of the Scottish Antiquaries is the rude pair of iron forge-tongs figured above. They measure thirty and a half inches in length in their present imperfect state, and are described in the minutes of the Society as having been discovered buried under the steep bank of a river in Glenorchy, thirty feet below the surface. It is farther added, in the neighbourhood of the spot great quantities of charcoal were found, and other indications that anciently there had been a smelting work there, though no trace of it now exists in the history or traditions of the country.

[1] Logan's Scottish Gael, vol. ii. p. 195. [2] Stuart's Costume of the Clans, Introd. p. li.

CHAPTER III.

STRONGHOLDS.

NEXT to the sepulchral monuments and the temples of remote ages, the fortifications frequently furnish the most durable and characteristic evidences of skill, and of the civilisation of the era to which they belong. In the Great Valley of the Mississippi, after Anglo-Saxon colonists have for upwards of two centuries been effecting settlements on the soil of the Red Indian, and obliterating every trace of him by their more enduring arts, the burial mounds and the forts of a race still older than the Red Indian remain to attest the pre-existence of civilisation in the American continent. Here, too, where for nine centuries at least, we can find authentic records of builders, sculptors, ecclesiastical architects, and military engineers, fashioning rude materials into goodly fabrics, of which traces are still discernible: we also can discover the wrecks of older structures reared in those dim and remote eras, into the secrets of which we long to penetrate. "How cold is all history, how lifeless all imagery, compared to that which the living nation writes, and the uncorrupted marble bears! How many pages of doubtful record might we not often spare, for a few stones left one upon another! The ambition of the old Babel-builders was well directed for this world. There are but two strong conquerors of the forgetfulness of men, Poetry and Architecture; and the latter in some sort includes the former, and is mightier in its reality. It is well to have not only what men have thought and felt, but what their hands have handled, and their strength wrought, and their eyes beheld all the days of their life. The age of Homer is surrounded with darkness, his very personality

with doubt. Not so that of Pericles: and the day is coming when we shall confess that we have learned more of Greece out of the crumbled fragments of her sculpture, than even from her sweet singers or soldier historians."[1] The Scottish "Caterthun" is no Athenian Acropolis, and our monolithic temples, though not ineloquent memorials of their builders, must rank with the primeval cyclopean structures of Greece, and not with her Parthenon or Colonna. But the aboriginal strongholds, though mostly of a sufficiently rude and primitive character, must not be overlooked in reviewing those "conquerors of the forgetfulness of men." The construction of offensive and defensive weapons is one of the earliest evidences afforded by man, in a savage state, of that intelligence and design by which he is distinguished from the brutes. Domestic and social relationships follow, from whence spring society, ranks, laws, and all the primary elements of civilisation. Among the first indications of such progress is the union for mutual defence, and the erection of strongholds for the safety of the community and the protection of property when threatened by invading foes. Herein lie the essential rudiments of a commonwealth, when the weal of the community and of its individual members have been recognised as the same.

A very slight review of the more simple class of British hill-forts will suffice, since we fortunately possess, in many of the contemporary records already described, more precise and definite history than they can now yield. It is for this reason that all notice of the aboriginal strongholds has been reserved till now, though it cannot admit of doubt that some of the simplest of them are contemporary with the pit-dwellings of the Stone Period, while others manifest such improvements as seem best to accord with the arts and weapons of the Archaic era which succeeded. Of these we have the circumscribed mote-hill or earthen-mound, steeply escarped, and with the remains of its little vallum of earth surmounted originally by the stronger palisades for which the neighbouring forest supplied abundant material. Nearly akin to these are the small circular forts of earth and loose stones which still crown the summits of so many Scottish hills; their lofty sites having secured them from the inroads of the agriculturist, while his aggressive ploughshare has obliterated all traces of the far more skilfully constructed Roman camp and military road which once occupied the neighbouring valleys. Within the area of

[1] Ruskin's Seven Lamps of Architecture, p. 164.

some of these, or scattered about their neighbourhood, flint arrows and other primitive weapons have been frequently found, accompanied occasionally by more valuable relics. On removing, in 1830, the rich black mould nearly filling the trenches of three such forts, the remains of which still crown the ridge of a rising ground above the valley of Dalrymple, Ayrshire, human skulls and bones, deer's horns, and a horn-lance or spear-head of primitive type, were discovered. Similar records of the aboriginal fort-builders must no doubt frequently be turned up in the course of agricultural operations: but they can only tell us what is already obvious, that this class of strongholds, or duns, as they are locally termed, pertain to a people whose arts were still in their infancy. Some, however, of the small hill-forts must be regarded as the mere temporary lodgements of British outposts, in times of actual open war. Of this class probably are the earthworks on the summit of Birrenswork Hill, in Annandale, while the more extensive intrenchments of the Roman legions occupy the level areas at its base. Similar works are also to be met with in the Western Highlands. At Knoc Scalbert, near Campbelton, Argyleshire, is a fort of larger size and more complicated design, covering an area of about fifty paces in diameter; but the neighbouring heights retain the traces of the smaller outpost stations, indicative, when thus found in combination, of considerable skill and warlike strategy. Such also may be presumed to be the origin of these small hill-forts, where we trace a line of them on a series of successive heights, as may be seen on the Lammermoors and in other Scottish districts, and is especially noteworthy along the southern slopes of the Kilsyth and Campsie hills, immediately to the north of the great Roman wall. These are obviously the outposts of the hardy Caledonian, from whence he watched his opportunity for some sudden foray or midnight surprise of the garrisons occupying the stations along the wall, and which he maintained with such persevering success that the Roman conquerors had at length to give way, and to fix the northern limits of empire on the older line of Hadrian, between the Solway and the Tyne.

The circular British forts or camps surmounting the heights of Galloway and the Lothians, and more or less common in nearly every district of Scotland, generally occupy an area of from three hundred to four hundred feet in diameter, and are inclosed with ramparts of earth and stone, or occasionally entirely of loose heaps of stone,

which have lost through time every trace of any definite form of masonry they no doubt once possessed. But the subject has already been treated of with ample details in Chalmers' Caledonia;[1] and little that is worth recording can be added to his careful researches. Roy also includes the most important of these native strongholds in his "Military Antiquities," superadding to his descriptions, plans and sections, by which a very perfect idea can be formed of their original design. These include Wood Castle, a very remarkable circular fort near Lochmaben, in Annandale,[2] which General Roy describes as a Roman post, though it differs in every possible feature from any known example of Roman castrametation. That it is a British stronghold is not now likely to be called in question. It bears, indeed, a singularly close affinity to the circular earthworks which so frequently accompany the Scottish monolithic circles. Others of the supposed Roman forts bear scarcely less conclusive marks of native workmanship, as the intrenched post on Inch Stuthill, near the Tay, (*Plate* XVIII.;) Liddel-Moat, near the junction of the Liddel with the Esk, (*Plate* XXIII.;) Castle Over, situated on a high point of land, formed by the junction of the Black and White Esks, (*Plate* XXVI.) supposed by Roy to be the Roman Uxellum; and Burgh-Head, on the Murray Frith, (*Plate* XXXIII.) which he unhesitatingly assigns as the Ultima Pteroton of Richard of Cirencester, and the Alata Castra of Ptolemy. All of these bear a curious general resemblance to some of the aboriginal forts of the Mississippi Valley; thus affording, under another aspect, evidence of the mind of man operating in the same way when placed in similar circumstances, and with a force not perhaps greatly differing from the unerring instincts of the lower animals. The last example, that of Burgh-Head, possibly includes some remains of Roman works. The straight wall and rounded angles, so characteristic of the legionary earthworks, are still discernible, and were probably much more obvious when General Roy explored the fort; but its character is that of a British fort, and its site, on a promontory nearly inclosed by the sea, is opposed to the practice of the Romans in the choice of an encampment. The remarkable general correspondence of the Scottish "Deil's Dike," described in the last chapter, to the Scoto and Anglo-Roman walls, proves that the native Britons were not slow to avail themselves of the superior engineering skill of the invaders, displayed in military works of more importance than

[1] Vol. i. pp. 87-96.

[2] Roy's Military Antiquities, Plate VIII.

the mere rectangular vallum.[1] The fortifications here specified are not, however, to be classed with the simple circular hill-forts first noted, wherein we trace the mere rudimentary efforts of a people in the infancy of the arts. They display equal skill in the choice of site, and in the elaborate adaptation of their earthworks to the natural features of the ground. Though undoubtedly of native workmanship many of these are not improbably contemporary erections thrown up by the native Caledonian to withstand the encroachments of the Roman invader.

But the most remarkable British fort to the north of the Tweed, if not indeed in the whole island, is that which crowns the summit of Caterthun, looking across the valley of Strathmore. Two neighbouring heights are occupied with British forts. The larger of these, called the White Caterthun, from the colour of its walls, is an elaborate, skilfully constructed stronghold, which must have formed a place of great strength when held by a hardy and well-armed native garrison. It is of an oval form, inclosing an inner area of four hundred and thirty-six feet in length, by two hundred feet in breadth. But this only constitutes what may be regarded as the citadel. Beyond it a succession of ramparts and ditches surround the height at lower elevations, including a much larger area, and affording scope for a more numerous body of defenders. The hollow is still visible, though now nearly filled up, which was once the well of the fort, and probably this strength was maintained as a rendezvous and place of temporary retreat for the entire population of the surrounding district. The White Caterthun has been repeatedly engraved, and its construction and details will be best understood by a reference to the plans and sections in Roy's Military Antiquities.[2] The Brown Caterthun, which crowns another hill about a mile to the north, is also a specimen of ingenious native fortification. Its ramparts are nearly circular, and a series of concentric intrenchments extend down the slopes of the height.[3] Both of these native military works have been constructed with immense labour. The astonishing dimensions of the rampart of the former, composed of an accumulation of large loose stones, upwards of a hundred feet thick at the base, and fully twenty-five feet thick at

[1] A still more striking proof of such acquired skill is furnished by the existence of a similar moat and rampart in the north of Ireland, of which an account is given by Dr. Stuart in his Historical Memoirs of Armagh.

[2] Plate XLVII. It is also engraved in King's Munimenta Antiqua, Plates I. and II.; and in Pennant's Tour, vol. iii. Plate XVI.

[3] Roy, Plate XLVIII.

the top, with its extensive lower earthworks and ditches, excite surprise and wonder in the mind of every observer. General Roy remarks after a careful survey of it,—"The vast labour it must have cost to amass so incredible a quantity of stones, and carry them to such a height, surpasses all description."

Another remarkable hill-fort of the same class is at the Barmekyn of Echt, in Aberdeenshire; and at Dundalaiv, on an unusually steep and rugged height in Glenshiora, Badenoch, is one smaller, but perhaps more striking, from the superior masonry of its walls. These are from twelve to fourteen feet in thickness, and being built of thin flat schistose slate, the walls remain in parts fully fourteen feet high, and apparently as perfect as when first erected. The inclosed area of this ancient fortress also contains a well, and considerable ingenuity has been shewn in strengthening the weaker points of the position. Altogether, it is the most perfect relic of a British stronghold of the class that I know of in Scotland.

The so-called "Vitrified Forts" of Scotland which have been the subject of so many ingenious and baseless theories, form another interesting class of native works. Attention was first drawn to them by Mr. John Williams, in his "Account of some remarkable Ancient Ruins, lately discovered in the Highlands and northern parts of Scotland," published in 1777. Mr. Williams had been employed by the trustees of the Scottish estates forfeited in the last rebellion, to superintend some operations in his capacity of a civil engineer, and in the course of this he for the first time investigated the singular remains to which he gave the name of Vitrified Forts. So entirely new was the discovery that it was generally received at first as an extravagant fiction, and no London publisher could be persuaded to undertake the publication of Mr. Williams's Account. His facts, however, proved indisputable, and theorists thereupon undertook to combat his conclusions, and to assign to the supposed forts a volcanic origin. The appearance of some of the most remarkable of these works is well calculated to sustain such a theory. The fortified area on the Top-o-Noth, near the village of Rhynie, Aberdeenshire, for example,—one of the most remarkable specimens of a vitrified fort in Scotland,—could not be more accurately described than by comparing it to the crater of an extinct volcano.

Since the first announcement of Mr. Williams's remarkable discovery there has been no lack of observation or controversy on the sub-

ject, though not always with very satisfactory results. In 1825 the Society of Antiquaries of Scotland directed special attention to it, and the results of a series of careful investigations are published in the fourth volume of the Archæologia Scotica, made chiefly under the direction of the late Dr. Samuel Hibbert, one of the secretaries of the Society, and further qualified for the duty as an experienced practical geologist. The fruit of these investigations may be thus stated:—Dr. Hibbert arrives at the conclusion that the vitrification is an incidental and not a designed effect,—having formed no part of the process of erection of the forts or cairns on which it is now traceable, but resulting accidentally from the frequent kindling of beacon-fires as the signals of war or invasion, as well as from bonfires which formed a part of festive or religious rejoicings; and indeed from numerous independent causes, probably no less widely dissimilar in dates than in origination. The nature of the sites, also, where vitrification has been detected proves that it is by no means confined to fortified positions; nor when it does occur on such is it generally found diffused throughout the ramparts of stone, or even restricted to their limits. Dr. Hibbert accordingly rejects the name of *vitrified fort* for the more comprehensive and untheoretical one of *vitrified site*, as most descriptive of remains which appear to include small inclosures for the protection of beacon-fires; sites of bonfires periodically lighted at the ancient places of rendezvous for tribes or clans; and hearths of fort-beacons and signal-fires, occasionally occupying not the ramparts but the ditch.

The only argument which tends to throw any doubt on the result of Dr. Hibbert's conclusions is that of Dr. Macculloch,—a shrewd observer, little inclined generally to extend toleration to any antiquarian hobbies but his own,—who affirms, that in situations where the most accessible materials for constructing a stone fort are such as are incapable of being vitrified, suitable materials have been selected and brought with considerable labour from a distance.[1] But the evidence

[1] "I remarked that at Dun Mac Sniochain the materials of the hill itself were not vitrifiable, but that a very fusible rock was present at a short distance, or scattered in fragments about the plain. The same is true here, (Dunadeer); and in both cases the forts are not erected out of the materials nearest at hand, which are infusible, but collected with considerable labour from a distance. It is hence evident that the builders of these works were aware of the qualities of these various rocks; and it is equally evident that they chose the fusible in preference to the infusible, although with a considerable increase of labour. The obvious conclusion is that they designed from the beginning to vitrify their walls."—Highlands and Western Isles of Scotland, vol. i. p. 292.

of design in the choice of such materials is by no means apparent. The examples referred to by Dr. Macculloch only confirm the fact, already familiar to the chemist and geologist, that there are very few districts in Scotland where rocks do not occur capable of being more or less vitrified. This subject is fully illustrated by an interesting series of experiments carried on by Sir James Hall, towards the close of last century, with a view to test some of the geological theories in reference to the igneous formation of rocks, which then furnished a fertile theme of controversy between the disciples of Werner and Hutton.[1] All the varieties of trap are so peculiarly susceptible of fusion, that they have been recently selected as the most efficient and economical flux in the smelting of copper ores. I am indebted to Dr. Francis Hay Thomson, the inventor and patentee of the ingenious application of the common rocks to this novel purpose, for communicating to me the results of his experiments. His invention chiefly consists in "the application of what are commonly called whinstones, and of other stones similar to whinstone—such as trap, basalt, sienite, and the like, being fusible silicates, as a flux in the smelting of copper ores." He has found all these materials capable of easy and complete fusion in a reverberatory furnace; but a much more moderate degree of heat would suffice to produce the conglomerated masses usually found on vitrified sites, where the larger stones are merely inclosed and cemented together by the fused matter. In reply to inquiries as to the probable effect of bale-fires kept blazing repeatedly on the same ramparts or heaps of stones, where a gradual accumulation of ashes from the burning pile must fill up the intervening spaces, and supply a flux capable of combining for the ultimate fusion of the whole, Dr. Thomson remarks:—

"Granite is *per se* very infusible; that of Aberdeen almost entirely so, in consequence of the presence of an overplus of silica. Sandstone is *per se* quite infusible, being almost entirely *silica*. Your supposition may, however, be correct, for the addition of the alkali produced from the wood-ashes would much assist the fusion of all kinds of stone that might be used in building these forts. Whinstone contains at least four per cent. of pure soda, fifteen of iron, and from twelve to twenty of lime. All these form a most fusible mixture, and the silica present is only in such proportion as is necessary for vitrification. Limestone is of itself not fusible except at a very high temperature; but the addition of either iron or soda with silica renders it at once vitreous. Although I am not certain as to the

[1] Experiments on Whinstone and Lava, by Sir J. Hall, Bart. Trans. Royal Soc. Edin. vol. v. p. 45; Series of Experiments on the Action of Heat, vol. vi. p. 71.

exact degrees of heat requisite for the fusion of these materials, I may mention that, in an ordinary reverberatory furnace, I have fused five cwt. of whinstone in one hour and a half, the product being a dark mass similar to bottle-glass; and I have no doubt, were proper precautions taken, that large slabs might easily be moulded for building purposes."

The degree of heat attainable in a reverberatory furnace manifestly greatly exceeds any temperature that could be produced by an exposed fire of wood; but the usual appearance of the vitrified masses found on the sites of forts or beacon-hills is such as proves them to be the product of a more moderate heat. The larger pieces are not fused into a homogeneous mass, but blocks of trap, granite, and sandstone, or occasionally all three in juxtaposition, are enveloped in a vitrified coating of irregular thickness, and bound into a solid piece by this extraneous substance. The alkali supplied by wood-ashes is abundantly sufficient to produce such a result. Carbonate of potash in contact with trap will readily melt at a red heat, and has a power of uniting with the constituents of the trap to form a fusible compound which hardens into glass in cooling. Fire-clay, which is altogether infusible, and less liable to be affected by heat than most of the known natural rocks, is employed on this account in making the chemists' crucibles; but if an alkali is melted in a fire-clay crucible, it forms a vitreous covering on the surface, and where large quantities are used even goes through the crucible. This is a fact familiar to the chemist, and so impossible is it to keep fused alkalis in contact with silicates, that only crucibles of platina or silver can be used for the analysis of silicious minerals. In this way even sandstone, though *per se* infusible, is perfectly capable of vitrification, and indeed is, under certain circumstances, peculiarly susceptible of it, as its great porosity admits of the ready absorption of the melted alkali.

This susceptibility of the degree of fusion usually observable on vitrified sites, which trap and others of the common rocks of Scotland possess, has long been recognised by able chemists; and when it is taken into consideration along with the very diversified and dissimilar circumstances under which vitrification has been observed, the conclusion seems inevitable, that it is an incidental and not a designed result of the application of fire. But neither the interest nor the importance of this inquiry is exhausted when we have established the undesigned origin of vitrified sites. The question still remains,—Are they peculiar to Scotland? because, even if we reject the idea

that the cementing of stone buildings by means of fire is among the *artes deperditæ Scotiæ*, still the discovery of so many vitrified sites in nearly every district of Scotland, would seem to indicate the practice of peculiar customs and observances during those early centuries in which the primeval forests furnished an unlimited supply of fuel. It is at all times a precarious and unsatisfactory basis of argument which depends chiefly on the absence of contrary evidence. Nevertheless it is worthy of some note, that although upwards of seventy years have elapsed since Mr. Williams published his account of vitrified forts, no single example, so far as I am aware, has been discovered south of the Tweed.[1] This cannot be ascribed to the subject being one of mere local or temporary interest. It has excited much controversy, not only among English antiquaries, but among the students of various kindred sciences; and while the geological features of some districts preclude the possible existence of such structures, it will, I think, involve very important conclusions as to the peculiar customs of the early Caledonians, if it be recognised as an established fact, that neither in the Welsh Highlands nor in the stone districts of England, are any traces of vitrified forts or sites visible. It has been the fashion of late years to give the whole question the go-by in very summary terms as one that has already commanded undue notice. Such, however, is a more convenient than satisfactory mode of dealing with the inquiry. Dr. Hibbert has appended to his "Observations on Vitrified Forts," a list of forty-four sites already noted, extending over twelve Scottish counties, including the most northern and the most southern districts of the kingdom. To these others have since been added, both north and south, in the Orkney Islands, and in the vicinity of Jedburgh, near the English border. It will suffice, meanwhile, to note these facts, in the hope that English Archæologists may, on fitting occasion, seek a reply to the inquiries which they involve:—Were the southern Britons, whether Celtic or Saxon, or the intruding Scandinavians or Gauls, wont to kindle bayle or beacon-fires on cairns, forts, or elevated sites, with

[1] I know of only one example yet noted out of Scotland, but it is a very remarkable one, and has been thought to confirm the idea of designed vitrification. (*Vide* Account of the *Pierres Brulées*, or Camp of Peran, a French primitive fort in the Commune of Clédrah. Journal of Archæol. Association, vol. ii. p. 278.) The researches of Mr. Squier and Dr. Davis among the ancient monuments of the Mississippi Valley, reveal various examples of partial vitrification, tending to confirm the more consistent idea of accidental and varying origin.—Smithsonian Contributions to Knowledge, vol. i. pp. 12, 17, 28, 36.

such frequency as to leave similar traces to those which are so common in Scotland? Or must we infer that these abundant remains are the result of ancient rites and customs peculiar to the races of the northern kingdom?

Dr. Hibbert has already invited the investigations of Scandinavian Archæologists, with a like view, anticipating, from the notices of Olaus Magnus, Snorro, and others, that vitrified sites should be found on the mountain tops in Norwegian provinces. Nineteen years have elapsed since Scottish Antiquaries appealed to those of Scandinavia for a reply. They have not been unmindful of the interests of archæological science in the interval, but still we wait in the uncertain negative which their silence furnishes; casting, meanwhile, some curious thoughts backward on the old Scottish festival of Beltane, and its apparent affinity to the rites of the Assyrian Baal.[1]

To attempt to assign a date for these primitive forts or vitrified sites would be manifest folly, but even to apportion them to one or more of those less definite periods is difficult. Some of them doubtless pertain to the earliest era of combined action, of which they would form one of the first results, while others may belong to a comparatively recent period; and, in particular, such border sites as those of Cowdenknowes and Howden Moor[2] perchance date no farther back than to those eventful times of watch and ward on the Scottish borders, quaintly referred to in the Act of James the Second's Parliament, in 1455, "for bailes making" to warn of the approach of the Southron foe: "Ane baile is warning of their cumming, quhat power that ever they bie of; twa bailes togidder at anis, they are cumming indeed; four bailes, ilk ane beside uther, and all at anis as foure candelles, suithfast knawledge that they ar of great power and meanis far."

The duns and vitrified forts of Scotland have long been the subject of observation and controversy; but there is another class of defensive earthworks observable in various Scottish districts, which, so far as I am aware, have not yet attracted the notice of the antiquary, though sufficiently familiar to rustic observers. These consist of artificial trenches, generally dug in the side of a hill, and obviously designed for the hasty concealment of cattle from predatory bands of marauders, though in some cases tradition associates them with more remarkable events. One, for example, of considerable extent, situated between

[1] *Vide* Jamieson, *voce Beltane*, for a curious collection of notices of various dates, illustrative of this ancient Scottish festival.

[2] Archæol. Scot. vol. iv. p. 297.

Kintore and Inverury, in Aberdeenshire, is popularly known as *Bruce's Howe*, from an old tradition that it had afforded the means of concealment to a party of Robert the Bruce's army before the battle of Inverury. Its depth, like that of most others, is about eight feet, affording effective shelter and concealment both to men and horses. Another of these artificial trenches has been cut out of the side of a hill, near its summit, on the farm of Altyre, parish of Dalry, Kirkcudbrightshire. It is capable of containing about an hundred men, while a person concealed in it can see to a considerable distance, in the two principal directions of approach, without being observed. From the convenient retreat it afforded to the persecuted Covenanters in the time of Charles II., it still bears the name of the *Whig Hole*. A larger trench of the same kind exists along the side of a steep hill forming one of the range of Scuir-na-fion in Glencoe. This has been constructed with considerable skill, the trench running parallel with the range of hills, and opening at its west end in a gully formed by a small mountain stream, which joins the river Coe somewhat farther down. From a distance, or from any lower part of the Glen, the trench is quite indistinguishable, as the embankment, which in this case has been formed on the side of the hill, is sloped so as completely to coincide with the angle at which the latter rises from the valley. An intelligent correspondent, familiar with this part of the Highlands, informs me that he had frequently visited the Glen without being aware of the existence of the trench, though passing it at no great distance, and his attention was first called to it by observing the fresh colour of the herbage on the upper edge of the embankment, in contrast with the more olive hue of the hill-side beyond,—a phenomenon easily accounted for by the fall of the heavier and coarser debris of the embankment towards its base, thus leaving a finer soil along the ridge. Angus M'Donald, an old and intelligent native of the Glen, at once assigned its origin to troublous times, for the purpose of sheltering the natives and cattle of the Glen when surprised by an invading foe, and stated that it includes ample space for concealing three hundred head of cattle.

Various examples corresponding to those occur in different parts of the Highlands, belonging to no definite period, but indicating the dangers and the resources of a pastoral people, liable to sudden and frequent invasion by powerful warlike foes. A similar state of society, though at a period more advanced in civilisation and the practice of the

constructive arts, appears to be indicated in that remarkable class of structures peculiar to Scotland, and generally known as Burghs or Pictish-towers. These, like so many other of our native antiquities, it has been customary to ascribe to a Danish origin; but the increasing interest now manifested by native antiquaries in our northern antiquities, and the frequent communications which have taken place of late years between Scandinavian and British Archæologists, have sufficed to establish the important fact that no such structures are known in the old lands of the Northmen.[1]

The Scottish Burghs are large circular fortresses, or bell-shaped structures, built of unhewn stone, and entirely without cement. The most perfect example of these remarkable edifices is situated upon the island of Mousa, near to the mainland of Zetland; but many remains of them can still be traced, both on the northern and western isles, in Caithness and Sutherland, and on various parts of the north and west coasts of Scotland. They are nearly all formed precisely on the same plan, though differing considerably in size. The form is a truncated cone, occasionally slightly varied, as in that of Mousa, where the wall curves inward till it attains a certain height, and then returns gradually outward again, apparently with the same design as the corbelled battlements of a later date, which enabled the defenders more effectually to annoy any assailant who ventured to approach the base. With this exception the exterior displays no ornamental projections, or any provision for defensive operations, by means of window, loop-hole, or machicolation. The rude but very substantial masonry of the exterior is only broken by a plain narrow doorway, which, from the absence of gate-posts, grooves, or any of the ordinary refinements of more modern architecture, it is not improbable was

[1] Sir Walter Scott takes the Scandinavian origin of these structures for granted, while Dr. Macculloch, who delights to overturn the assumptions of every other antiquary, jumps to the far more extraordinary conclusion, that "there seems little reason to doubt the Picts and Scandinavians were radically one and the same people." The latter author then produces "perfect and incontrovertible proof of their real origin," by referring to certain examples said to be still visible in Norway. To this it is a very satisfactory reply that Mr. Worsaae, the distinguished Danish antiquary, has expressed his opinion that nothing at all resembling them is to be found in any of the Scandinavian countries; and Professor Munch of the University of Christiania, one of the most learned northern archæologists, completely confirms this, and assures me, after a personal inspection of several, that he is convinced they are of native origin, and peculiar to Scotland. There can be little doubt that Dr. Macculloch's "incontrovertible proofs" are derived, without acknowledgment, from the very dubious authority of the Rev. George Barry, D.D., of Shapinshay. Compare Macculloch, vol. ii. p. 257, and Barry's Orkney, p. 97.

secured, when danger was imminent, by building it up with a pile of stones. Within the exterior cone a second cylindrical structure is reared, the walls of which are either perpendicular, or constructed at an angle which, leaving a space between the two of about six feet at the base, brings them together at the top. Within this space between the walls a rude staircase, or rather inclined passage, communicates round the whole, and a series of chambers or tiers of interspaces, formed by means of long stones laid across from wall to wall, so as to form flooring and ceiling, are lighted by square apertures looking into the interior area. This central space is open to the sky, and the fact of the only light to the chambers and passages within being derived by means of apertures opening into it, seems to preclude the idea of its ever having been roofed. It is not apparent, however, by what means the occupants could obtain access to the ramparts, so as to resist an assault, and prevent the walls from being scaled, though a sufficiently rude and simple wooden structure may have supplied this very obvious defect.

Cordiner and Pennant have each given a very full account of Dun Dornadil, a Burgh or Pictish tower in Glenelg, and one of the largest of this singular class of military structures.[1] Gordon furnishes descriptions and engravings of Castle Tellve and Castle Troddan, two other examples which he examined;[2] and Dr. Macculloch also supplies a minute account and measurements of one of those in Glenelg.[3] "The masonry," he remarks, "is without lime, but remarkably well laid, and the lines of the curvature are beautifully preserved throughout. The floors of the galleries consist of single flags, and the window apertures are, in a similar manner, divided by transoms of stone."

One necessary consequence of the plan on which all these buildings are constructed is, that while the lower galleries are roomy, and admit of free passage, the space narrows so rapidly that the upper ones are too straitened even to admit a child. This is particularly observable in the Burgh of Mousa, which, though more perfect, is considerably smaller than that of Dun Dornadil, and consequently a much greater proportion of the internal galleries must have been totally unavailable, either for occupation or the storing of property. No great difficulty, however, need be made about this, even where windows are found made

[1] Pennant's Tour, vol. ii. p. 391.
[2] Itiner. Septent. p. 166.
[3] Highlands and Western Islands, vol. ii. p. 250.

in the inner wall, equally for the wide and the most straitened tiers of galleries. One model, and that a very simple one, supplied the design for all; and it would not be difficult to find corresponding examples in modern masonry where the same unreasoning fidelity to the original is shewn, as in the latest structures of the Tudor style, where unperforated gargoils project from solid walls, and flying buttresses are thrown where there is nothing to support.

The most remarkable deviation from the common arrangement of these singular structures is where, as in the Burgh of Achir-na-Kyle, Sutherland, regular conical chambers are constructed in the solid wall. This is a manifest refinement upon the original design, and may be regarded as the first progressive step in the art of military architecture. Cordiner remarks of this example:—

"It is situated with peculiar taste on the top of a lofty rock, opposite to some pleasant woods, and near excellent pasture; and round the precipice which overhangs the Brora, the river tumbles over its rocky channel in a number of irregular cascades. This building would have doubtless merited a very particular description, had it not corresponded with your account of those in Glenelg.[1] I must except the apartments within the walls, which are of an oval form, distinct and entire, about eight feet long, six high, and four wide. Those on the ground-floor are still a retreat from the storm for the goats that feed on the neighbouring hills. The stairs from the first to the second row of chambers are regular and commodiously made out. The apartments are carefully lighted by windows from within, a strong evidence that the area within these towers had never been closed above, or entirely covered. The door looks over the precipice towards the river, and is full six feet high. . . . One chamber had several plans of a level entry to it, and measured nine feet in height; this had been probably intended for the chieftain. The whole structure seems to me so well contrived that it is not easy to conceive a people who could not work in wood or iron could have been more conveniently accommodated in places of defence."[2]

Considerable skill and ingenuity is frequently shewn, both in the choice of a site for these defences and in turning it to the best account. They most frequently occupy capes, headlands, or small islands, either in a lake or on the open sea. Sir Walter Scott describes a curious device which he observed employed for guarding one of those in Shetland against the approach of strangers. "I remember," he remarks, "the remains of one upon an island in a small lake near Lerwick, which at high tide communicates with the sea, the access to which is very ingenious, by means of a causeway or dyke,

[1] Pennant's Tour, vol. ii. p. 391.

[2] Cordiner's Antiquities and Scenery of the North of Scotland.

about three or four inches under the surface of the water. This causeway makes a sharp angle in its approach to the Burgh. The inhabitants, doubtless, were well acquainted with this, but strangers, who might approach in a hostile manner, and were ignorant of the curve of the causeway, would probably plunge into the lake, which is six or seven feet deep at the least. This must have been the device of some Vauban or Cohorn of those early times."

These remarkable buildings can hardly be viewed with too great an interest by the Scottish archæologist. They are the earliest native architectural remains which we possess, the cromlechs and stone circles being at best only rudimentary and symbolic or representative forms of architecture. They constitute, therefore, a most important element in our national history, supplying very definite facts relating to an ancient era of which we have received no other information in any degree so trustworthy. The first point accordingly is to ascertain, with such accuracy and minuteness as may now be possible, the precise nature of these facts. Careful investigations have accordingly been carried on of late years, accompanied in several instances with excavations around the buildings and within the inclosed area, the results of which are worthy of note. In more than one instance human remains have been found on removing the accumulated rubbish and debris from these ancient ruins, suggesting the possibility of their correspondence to the *Nuraghes* of Sardinia, which they somewhat resemble in outward form. It is altogether inconceivable, however, to ascribe a sepulchral origin to these chambered towers; while the same excavations which have discovered the remains of the dead have also in most cases furnished no less conclusive evidence of the former presence of the living. But, it has been already observed, the archæologist finds both "knowledge and understanding" in the grave, and esteems it a conceivable source of valuable insight to have even these dead to question on the subject. Dr. Macculloch mentions the discovery of human bones in the Burgh of Glenelg, but without entering into details; but the results of a careful examination of another of these towers, near Dunrobin, in the summer of 1849, elicited more definite information. On removing the rubbish from the chambers and galleries, a human skeleton was found in one of them, while excavations within the open area disclosed abundant traces of a fire in the centre, and also discovered several stone querns or hand-mills. The skeleton here appeared obviously to belong to a later period than

the querns and the central fire; but no accompanying relics of the deceased were found to tell how long the fire of the old garrison had been extinguished ere the chamber of their fort was made a receptacle for the dead. More satisfactory results attended the examination of the Burgh of Burghar, another of these singular towers in the parish of Evie, Orkney. It is described by Mr. A. Peterkin, in a letter addressed to Dr. Hibbert in 1825, as the most perfect though not the largest of several in the neighbourhood. Several barrows occur in the vicinity, some of which have been opened and found to contain urns. The central area of the Burgh of Burghar was nearly filled up with the accumulated ruins and rubbish of centuries, and resisted more than one effort to explore it; but the son of the clergyman of the parish renewed the attempt in the spring of 1825, and succeeded in partially investigating the contents of the ruined area. On digging out the earth and rubbish,

he found a human skeleton, beside which lay part of a deer's horn, and the rude bone comb represented here, about one-third the size of the original, which is now deposited in the Museum of the Scottish Antiquaries. Mr. Peterkin appears also to have forwarded the skull to Dr. Hibbert, though it has not been preserved. His description of it has already been noticed in a former chapter.[1]

More extensive excavations were made within the ruined burgh at a subsequent period, and led to the discovery of some very valuable relics, including two fine gold armillæ, now in the possession of the Earl of Zetland. In this example also there can be little hesitation in assuming that the deposition of the dead body did not take place till the abandonment of the burgh, perhaps not till it had been long in ruins, as it does not appear from the description to have been below the level of the original floor, but within the accumulated soil which encumbered the area. This, however, is open to doubt, as the letter is not quite explicit; and if the interment was at some depth below the floor, it might have taken place while the burgh was occupied, and an assailing force precluded access to the neighbouring downs on which the aboriginal sepulchral tumuli are still

[1] *Ante*, p. 178.

visible. It may be doubted whether the gold relics were placed there as a sepulchral deposit, or only for security or concealment. They belong possibly to a period long subsequent to that of the first interment with its simple and rude accompaniment of the bone comb. The latter discovery, indeed, seems to furnish some approximation to the period of those buildings. It shews, what we might expect, that they are the work of a people whose arts were extremely rude, and so far as any general reasoning may be built on a solitary instance, it seems to point to the erection of the burghs at a period long prior to the earliest recorded traces of Scandinavian invasion. The discovery, however, is not altogether without precedent. Another bone comb in the Museum of the Scottish Antiquaries, of even ruder construction, though nearly resembling the one found at Burghar in its general form, was found, in 1782, in the ruins of another burgh in Caithness, and a third discovered under similar circumstances is in the museum at Kirkwall. There appears, indeed, to have been a predilection for burying among the debris of the ruined forts, which must be supposed to have been formed long subsequent to their abandonment as strongholds and places of abode, and therefore adds to the evidence of their great antiquity. Some of these interments are undoubtedly traceable to the period of the Scandinavian occupation of the Orkney Isles.

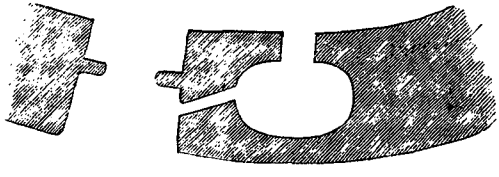
Mr. W. H. Fotheringham of Kirkwall, Orkney, has communicated to me an account of the recent exploration of another ruin of a circular fort, apparently belonging to the same class of buildings as those previously described. It occupies as usual an isolated promontory, called the How of Hoxay, in South Ronaldshay, immediately opposite to the Bay of Scupa. Rising abruptly from the small Bay of Hoxay is the How or Height of Hoxay, on the top of which are the remains of a circular building. Until brought to light in the course of recent excavations it was entirely buried beneath the accumulated soil, and presented only the appearance of an earthen tumulus. It has now been completely exposed externally, and the inclosed area excavated to the surface of the rock, so that the work of exploration has been most effectually performed. The external wall measures fourteen feet in thickness, and about eight feet in greatest height, and incloses an area of about thirty feet in diameter. The construction of the wall is singular, the exterior and interior facings appearing to have been carefully built with unhewn stones fitted together with great nicety, and the intervening space filled up with stones thrown in with little care

or design. No cement had been used, but the wall is still strong and without any displacement in the facings, though so much ruined that no certain idea can now be formed of its original height. The great quantity of stones which lay both within and about it served, however, to shew that only a small portion of the original fabric remains. The accompanying view of the most perfect side of the interior will

How of Hoxay.

convey a better idea of the general appearance and details than any description could do. The two upright stones about half way up the wall on the left of the drawing appear to be the side-posts either of a door or outlook, to which the projecting step below was probably designed to give access; but it was found built up like the other parts of the walls, and the proprietor having since, in a misdirected zeal for the preservation of the ruin, had the whole pointed with lime, it is no longer possible to detect the additions of later builders. Round the inner circumference of the wall upright flag-stones project at intervals of six feet apart. Only six of these now remain, but the fragments of others were discovered among the debris. In the recesses formed by these projecting stones there were found several stone querns, a shallow stone mortar and pestle, or corn-crusher, of the rudest and most primitive construction, and also two smaller circular stone vessels, the one seven and the other five inches in diameter, and both about four and a half inches deep. The remains of the doorway in the eastern and most ruined part of the wall appear to have been of an unusually intricate construction, but these also have unfortunately been obliterated by later repairs, the whole wall having been raised to a uniform height, and a platform and flagstaff superadded in very questionable taste.

The proprietor was actuated in his labours by a sincere desire for the preservation of this venerable ruin, and antiquaries must respect his motives, though he has not effected it exactly in the way they would have wished. I am favoured by Mr. Fotheringham with the following description and sketch :—" As to the door on the east side, the information I have got is that it was contracted by means of slates thus; and that at the side of the door was a chamber in the thickness of the wall leading from the interior, from which there was an aperture or slit to the widest part of the doorway, either for the purpose of outlook, or for projecting a weapon against a hostile intruder." This arrangement in the construction of the doorway more nearly approaches the plans for outlook and defence with which we are familiar in medieval military architecture. It is greatly to be regretted that no opportunity was afforded for more accurate observation.



The result of these investigations is highly satisfactory and encouraging, giving promise of further information from the labours of future explorers. Meanwhile some important conclusions may be arrived at. It is not necessary that we should follow Cordiner in his learned arguments concerning King Dornadil, a successor of Fergus I., who ascended the throne A.D. 263, and signalized his reign by erecting the Burgh of Dun Dornadil on the north-west coast of Inverness-shire. With precise dates the archæologist can rarely, if ever, have aught to do while treating of primitive antiquities; but this at least seems established, that they are native erections, and belong for the most part to a period long prior to the era of Scandinavian invasion. Where the Teutonic and Scandinavian races ultimately prevailed they bear the name of Burghs; where the older Celtic race and language survive they retain the name of Duns: and Sir Walter Scott has pointed out, in an ingenious note appended to Ivanhoe, that the venerable Saxon stronghold of Conigsburgh is only a refinement on the older model of the Scottish burghs. This has been illustrated by drawings and sections in the Abbotsford edition of the novels, and the resemblance is certainly sufficient to carry much probability with it, though at the same time the complicated arrangements, and the provisions for

aggressive operations against assailants in the burgh of the southern Saxon, cannot but add to the conviction that the Scottish strongholds of this class belong to a much earlier period. They are manifestly the work of an ingenious and patient race, who aimed far more at defence than aggression. Strongholds they undoubtedly are, but they retain no trace of features strictly adapting them to military posts. The Saxon burghs of England were rapidly superseded by the more efficient keep of their Norman conquerors; yet when we institute a comparison between Conigsburgh and Mousa or Dun Dornadil, it seems to present a contrast not unlike that which distinguishes the defensive operations of the wild-cat and the hedgehog!—a contrast which either marks a very great change on the character of the hardy tribes that withstood the Roman legions, or indicates a marked difference between the races which occupied the northern and southern regions of Caledonia.

Dr. Macculloch remarks of these Scottish burghs,—"From the expensive nature of their construction, or the power of hands that must have been employed on them, it might be supposed that they were the palaces or castles of the chiefs or kings of the days in which they were erected. But it seems an insuperable objection to this notion, that four should have existed within so small a distance from each other in Glenelg, or that so many should be found in Sutherland and in Shetland not far asunder. The limits of territory that surround any one are too narrow for any chief; and where all chiefs were in a state of general and constant hostility, it is not likely that they should have chosen to build so near to each other. It is equally impossible that they should have been the dwellings of the inhabitants in general, as the expense of erection bears no proportion to the limited accommodation they could afford." The expense of erection is, in other words, the labour, time being of small value in a primitive state of society; and when their number is taken into consideration along with their limited accommodation, it is difficult to evade the conclusion that they were the temporary places of shelter of a people liable to sudden inroads from powerful foes, like the palisaded log-house or fort which the first settlers in the backwood frontiers of America were wont to erect as a place of safe retreat on any attack of the treacherous aborigines. There is no period that we know of in early Scottish history to which this description so aptly applies as to that immediately preceding the conquest of the Ork-

neys by Harold Harfager, about the year 889. Prior to this the rude Norse Vikings were wont to make sudden descents on these islands, as well as along the whole Scottish coast, spoiling and slaying with the most remorseless cruelty. At such a period, therefore, we can most readily conceive the natives of a district combining to build a burgh, whither they could retreat so soon as the fleet of the northmen was espied in the offing, and driving thither their cattle, and carrying with them all their most valuable moveables, they could lie secure till the spoilers set sail again in quest of some less watchful prey. Experience would teach the necessary improvements requisite for rendering these structures effectual against such foes; while the improbability of the northmen abandoning their ships and attempting a regular siege of one of these burghs, may account for the absence of the very distinct provisions for offensive operations against assailants which are so characteristic of the Anglo-Saxon burgh.

The Burgh of Mousa, which is still the most perfect of these ancient strongholds, is the only one of which we have any distinct historical notice. Torfæus tells us that Erland, the son of Harold the Fair-spoken, carried off the mother of Harold, a Norwegian jarl, who was famed for her beauty, and took shelter with his prize in the Castle of Mousa. Earl Harold followed and laid siege to the place, endeavouring first to take it by assault, and afterwards to reduce it by famine. But both means proved equally ineffectual, and the wrathful Jarl was forced at length to agree to terms by which his mother became the wife of her ravisher. This burgh is not only the most perfect, but also the best adapted for defence of any that now exist; and it is not improbable that it owes its projecting parapet, as well as the more effective repair which has secured its preservation, to its later Norwegian occupants.

Still it does not necessarily follow from the correspondence of the state of society in the north of Scotland in the ninth century, as a weak people, constantly liable to sudden inroads by powerful and merciless invaders, with the apparent indications of these strongholds, that we must therefore assume the origin of all of them to that period. The conquest of the Orkneys, and the occupation of the northern districts of Scotland by the northmen in the ninth century, marks the close of a period which is still involved in almost total darkness. How long before this the natives had learned to watch the horizon for the dreaded fleets of the northmen, or in what form

the earliest migration of the Cruithne to the north took place, we have yet to learn; but the very fact of the frequent descents of the former on our coasts must be viewed as affording some evidence that the arts of civilisation had advanced far beyond the rude state indicated by such primitive relics as those which were discovered in the How of Hoxay. The "exactors of rings" could have found little to tempt a second visit to the barbarian Orcades of the Stone Period; for the wandering Vikings knew not the pride of conquest which could tempt a Cæsar to guide his legions to the Ultima Thule, that he might return to the proud honours of a Roman triumph. The disappointed Viking might indeed be not inaptly supposed to apostrophize the outlooking Orcadian, as the English poet Cowper has done the "Gentle Savage" of Tahiti:—

> "Expect it not. We found no bait
> To tempt us in thy country.
> We travel far, 'tis true, but not for nought;
> And must be bribed to compass earth again
> By other hopes and richer fruits than yours."

Without attempting to deduce from such evidence as is now attainable, more than it seems fairly to warrant, it is obvious that we have followed down the unwritten history of our island from that remote and imperfectly defined era in which we catch the first glimpses of its occupation by wanderers from the eastern home of our common race, to the period when definite history begins, and written records supply to some extent the information heretofore painfully sought amid the relics of older times. There still remains, however, some few pages more of these archæological annals to be deciphered before we attempt to sift the perplexing mixture of truth and fable which makes up our earlier written history.

CHAPTER IV.

WEAPONS, IMPLEMENTS, AND POTTERY.

The state of isolation, with all its attendant influences, must now be considered finally at a close. The effects of European civilisation rapidly modified the primitive native arts; and during this era, to which the name of Iron Period is applied, that strange mingling of races was chiefly effected which has resulted in our singular British nationality, in our peculiar virtues and our equally peculiar deficiencies. The Roman influence also failed not, even while indirectly operating, greatly to accelerate the development of the new era. Long before the invasion of Julius Cæsar, or the Roman working of lead and iron mines in England, the increasing demands for iron in the south of Europe could not fail to add somewhat also to the supplies of the north; nor is it improbable that the impetus communicated to the European workers in metals during the protracted struggles of the Punic wars, and the civil commotions which followed on the final supremacy of Rome, mainly contributed to furnish the native Britons with the arms by means of which they withstood both Julius Cæsar and Agricola.

Whatever effect the long occupation of England as a Roman province may have had on the native mythology and sepulchral rites, we have no reason to think that any change was produced on those of Scotland. Relics of the Roman period have been found in tumuli and cairns alongside of the rude British cinerary urn, the bronze spear, and even the stone celt; nor was it till the introduction of Christianity that the Scottish circumscribed cist was entirely abandoned for a sepulchre of ampler proportions. Sepulchral pottery is

found alongside of relics of all periods, from the rudest primeval era to that of the general adoption of Christianity; but even where it is accompanied with Roman relics it betrays no indications of any familiarity with the artistic design or manufacturing processes of the Roman potter. The transition is at once from the primitive pottery apparently to that introduced by the Anglo-Saxons. On warlike implements, however, it is probable that the collision with the Roman legions exercised an important influence, though it is now difficult to ascertain its precise character or extent. The state of decomposition in which iron relics are usually found frequently renders it impossible to discriminate between those of Pagan and medieval eras. A few Scottish examples which have been noted from time to time, will, however, supply the means of forming some conclusions relative to the arts of this period.

Lieutenant-Colonel Miller in his "Inquiry respecting the Site of the Battle of Mons Grampius," thus describes some of the antiquities of the locality, which he conceives, with considerable probability, to be relics of native art contemporary with the Roman invasion of North Britain in the second century:—"At a point near Gateside a vast cairn stood until about forty-two years ago, and there the last stand of the Caledonians in a body seems to have been made. Upon removing this cairn many bones were found, and great quantities of iron. Many of the pieces were very small, so as to be called knives and forks by the workmen. Others again were very large; too much so, one might almost suppose, from the account I have had of them, even for the *enormes gladios* of the Caledonians. None of them have unfortunately been preserved, as they were probably completely oxidized, and reckoned of no value. Great numbers of beads were also found in the cairn, and distributed about the country at the time as curiosities. A few of these are still preserved, and serve to convey rather a favourable idea of the state of the arts at the time. Some of them were of a long elliptical form, and made of jet; others were made of a bluish glass, and shaded with spiral or circular lines; while others were white, enamelled with red and blue spots, the colours of which are as vivid as ever."[1] The same writer describes a great variety of stone and bronze relics found under a variety of circumstances throughout that district of Fifeshire. Many of these, however, must have belonged to very different periods, and most pro-

[1] Archæol. Scot. vol. iv. p. 43.

bably also to different races that succeeded each other in the occupation of the fertile region of country lying between the estuaries of the Forth and Tay, though all are pressed by him into the service, in order to add to the accumulated evidence by which he seeks to assign a precise site to the famed battle-field of Agricola and Galgacus. On the 22d November 1849, some farm-servants engaged in draining a field at East Langton, in the parish of Kirknewton, Mid-Lothian, found a skeleton about three and a half feet below the surface. The body lay south-west by north-east, imbedded in moss about three inches thick. Near the feet were found an iron knife, and a dagger with the remains of a wooden handle and a square gold plate and knob on the end of the haft, both greatly corroded and adhering together from the rust. There were also found in the same grave a wooden comb, broken and very much decayed, and a rude bodkin of bone measuring three and a quarter inches long, which had doubtless been employed in fastening the dress of the deceased. The knife is perforated with three holes, by which a handle must have been attached to it, but it is too much corroded to afford any correct idea of its original form. Near to these lay a wooden vessel and an earthen urn coated with green glaze, and rudely ornamented with a waved pattern; both of which were broken by the carelessness of the workmen. The accompanying woodcut represents the dagger and bone pin, the

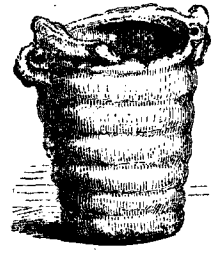
Iron Dagger and Pin, East Langton.

former of which measures with the handle thirteen and a quarter inches long. Nearly at the same time a quantity of billon pennies of James II., of the Edinburgh Mint,[1] were discovered in the field where this interesting sepulchral deposit was found. But it had been in cultivation upwards of fifty years, and there is no reason to think that any connexion was traceable between the two discoveries.

The glazed pottery accompanying the iron weapons at East Langton is a characteristic feature of the sepulchral deposits of the last

[1] Lindsay, Plate xxi. No. 6.

Pagan period in Scotland, and is perhaps one of the earliest indications of Anglo-Saxon influence. During the progress of the railway works for constructing a branch line of the North British Railway to North-Berwick, in 1848, two stone cists were discovered on the Abbey Farm, both of them measuring a little more than four feet in length, and each containing a human skeleton. In one of them was found an iron sword and dagger, both so much corroded as to break and crumble to pieces in the careless hands of the railway navies. At the side of the skeletons, in both cists, were urns of rough grey ware, ornamented externally with parallel grooves running round them, and internally covered with a green glaze. The woodcut represents one of these rescued in a partially dilapidated state from the railway excavators, and now in the possession of Andrew Richardson, Esq. It measures fully six inches in height, and it will be seen bears a singularly close resemblance to another urn of somewhat smaller dimensions, found in Aberdeenshire, and described below.



In 1791, four urns were discovered under a large stone near Drumglow Hill, Kincardineshire, and some others in a neighbouring cairn, of which the sole description given is that they were made of very coarse materials, and the outside glazed and ornamented with dotted lines.[1] In 1832, Lieutenant-Colonel Miller presented to the Society of Scottish Antiquaries "a finely formed barbed arrow-head of flint, and a fragment of what is supposed by the donor to have been a glazed sepulchral vase, found at Merlsford, at the foot of the Lomond Hill, Fifeshire."[2] This specimen is too imperfect to furnish any idea of the form of the vase, though it affords additional evidence of the introduction of this characteristic change in the primitive Scottish pottery at an early period.

The Old Statistical Account of the parish of Rathen contains a description of three cairns at Memsie, on the eastern coast of Aberdeenshire, which, it is remarked, "were very large, till of late, that great quantities of the stones have been taken away from two of them. The remains of human bones were lately found in one of them." The renewed invasion of one of these cairns about the year 1824 led to the discovery of the small urn here engraved. It mea-

[1] Sinclair's Stat. Acc. vol. iii. p. 561. [2] Minutes S.A. Scot., January 23, 1832.

sures four and a quarter inches in height, three inches in diameter at the bottom, and four at the top. Externally it is rough and destitute of any ornament, except the six parallel grooves which appear in the woodcut. Within it is entirely coated with a dark green glaze. Unfortunately, however, its most remarkable features no longer exist. Mr. John Gordon of Cairnbulg remarks in a letter with which he accompanied the donation of the urn to the Society in 1827,—"The urn has two projecting ears opposite each other, which fitted into corresponding double ones attached to a lid, by which the vessel, when found, was closely covered; and the whole of the projections were perforated to admit a pin which completed the fastening. The lid was unfortunately broken in opening the urn. It was made of the same materials, and fitted into the mouth which was formed for its reception." Part of the rim has also been broken away, but enough remains to shew, that above each projecting ear is an opening into which the lid had fitted as an additional security. No mention is made of anything having been found within the urn thus carefully secured, but beside it lay a sword, unfortunately no longer known to exist. It is described as "one-edged; the hilt of brass, the blade iron, seventeen inches and a quarter long, one inch and a quarter broad at the guard, from whence it tapers to the point; when found it was enclosed in a wooden scabbard." It appears to have borne considerable resemblance to an iron sword found by Sir Richard Colt Hoare, in a tumulus opened by him at King's Barrow, in the Vale of Warminster, "which had a handle of oakwood. The blade was about eighteen inches long, two inches wide, and single-edged."

In the year 1800, Mr. Robert Dalyell presented to the Society of Antiquaries of Scotland, a sword fractured in several pieces, portions of a helmet, battle-axe, and spear, all of iron, found under a cairn on his estate of Hunthills, Roxburghshire. But the whole are too much corroded to convey any very distinct idea of their original forms, though they add additional evidence in proof of the continued use of the sepulchral cairn, after the full development of the Teutonic era, with its characteristic implements of iron. In 1834 Professor Traill exhibited at a meeting of the Scottish Antiquaries the fragments of an iron sword, apparently that of a man of distinction, found along with

the boss of a shield, at a place called Swenedrow, in Rowsey, Orkney. In the same place many fragments of ancient armour have been discovered; and the Professor believed the sword to have belonged to one of the Norwegian jarls.[1] Pennant engraves another ancient sword discovered in the island of Islay;[2] nor are such discoveries rare, though they have seldom obtained the minute attention they merit. A remarkable discovery of arms and other iron relics was made in the month of August 1834, at Fendoch Camp, an intrenchment on the river Almond, about five miles north-east of Crieff, in Perthshire. It is commonly described as a Roman camp, and the urns found in numerous cairns which surrounded it are no less unhesitatingly assigned to the legionary invaders. A drawing which I possess of one of the urns found inverted within a cist under one of the cairns, leaves no room to doubt that these sepulchral mounds, at least, are of British origin, and probably of a date long prior to the era of Roman invasion. On the occasion above referred to, while a labourer was digging across the eastern rampart of Fendoch Camp, he discovered at some depth below the surface three iron pots or kettles, the largest of which broke in pieces while he was in the act of raising it from the ground. The other two measured ten inches in diameter by four and a half in depth, and eight and a half inches in diameter by three inches in depth. They were each composed of a series of concentric circles rivetted together, the larger one having a straight handle twenty-one inches in length. Along with these were also found three heads of spears or javelins seven inches in length, a portion of a sword-blade eighteen and a half inches in length, three pairs of bits, two pairs of shears eleven inches long, the blades alone measuring four inches, a sort of spoon or ladle ten inches in extreme length of handle and bowl, a beautiful hinge of yellowish metal four inches long, carved and plated with silver, in excellent preservation, besides various other implements. The most of these interesting relics were carefully packed in the largest kettle, and a flat stone placed on its mouth. This curious hoard was purchased by my friend, Mr. John Buchanan of Glasgow, under whose zealous care they might have been deemed secure of a safe asylum, but the weighty box in which they were packed tempted some covetous knave, and our only poor consolation for their loss is to picture the mortification of the thief when he unlocked his treasure and found only a chest full of rusty iron!

[1] Minutes S.A. Scot., May 19, 1834.

[2] Pennant's Tour, vol. ii. Plate XLIV.

But this unhappily is no solitary example of the destruction of ancient Scottish relics. "Vast quantities of arms," says the author of the Statistical Account of the parish of Cummertrees, Dumfriesshire, writing in 1834, "were lately found in a field on the farm of Corrieknows, near the burgh of Annan. The farmer who found them had them all, but a brass battle-axe, converted into husbandry utensils."[1] From inquiries since made, I find that the *brass battle-axe* was a bronze celt, so that, if we may assume, as seems most probable, that the iron weapons belonged to the same era, we have here most interesting examples of the weapons of the Teutonic Period. The farmer describes the swords as about two feet in length, edged on the one side to the handle, and on the other for the half length of the blade. Beside them lay some long spear-heads, nearly all broken, and more injured by rust than the swords. In the same field he also found a number of horse-shoes, some of which were an entire circle, and others curiously turned in at the heel. On the farm of Broom, in the same parish, there is a field called Bruce's Acres, where King Robert is said to have been defeated by the English; but the singular form of the horses' shoes found at Corrieknows adds additional evidence of these relics belonging to an earlier period. In the Museum of the Scottish Antiquaries there are horse-shoes from the field of Bannockburn and from that of Nisbetmuir, Berwickshire, fought 24th June 1355, after the captivity of King David Bruce. They are chiefly remarkable for their very diminutive size, and in no way correspond to those described above. Antique horse-shoes of a different form have repeatedly been found in the neighbourhood of Carlinwark Loch, Kirkcudbrightshire, a prolific source of valuable archæological relics. The ancient name of Castle Douglas, on the margin of the loch, is Causeway End, from its position in relation to an ancient causeway constructed through the marsh, and believed to be a part of one of the great Roman roads. About this place most of the ancient horse-shoes have been discovered. One of them in the collection of Mr. Joseph Train is described by him as consisting of a solid piece of iron, not made to go round the edge of the hoof, but to cover the whole. On the inside, especially towards the heel, it is hollowed so as not to press upon the soft part of the foot. Though much worn in front this cumbrous lump of iron still weighs about six pounds, so that four of them must have formed no slight impediment to a horse. To

[1] New Statistical Account, vol. iv. p. 249.

what period these equestrian furnishings should be assigned it is not easy to determine. No relic yet discovered along with the remains of horses, so frequently found in the later tumuli, suggests the idea of the early Britons having shod the horses which they attached to their war-chariots. Montfaucon, however, describes a small iron horse-shoe which was discovered in 1653, in the tomb of Childeric, founder of the French monarchy, whose horse had been interred along with him, A.D. 481. The Rev. Samuel Pegge, in an ingenious paper "On the Shoeing of Horses among the Ancients,"[1] conceives that the custom was introduced into England by William the Conqueror; but it seems exceedingly improbable that either the Anglo-Romans or the Anglo-Saxons should have remained ignorant of a device which some allusions of Homer would lead us to suppose was not unknown even to the Greeks of the Bronze Period.

Ure describes and engraves in his History of the Parish of East Kilbride,[2] a very interesting discovery made at Castlemilk in 1792, of a helmet, gorget, dagger, and other iron relics, along with which were two bronze vessels, one of them of peculiar form, and also the remains of a leaden vase; but these it is probable were medieval antiquities. No doubt, however, can be entertained of the era of another iron relic described by him, but of which unfortunately no engraving exists. Some workmen engaged in demolishing a cairn in the same parish found in it a large urn filled with human bones, and close by it an iron implement designated "an old spade of a clumsy shape," but which was more probably an ancient bill or battle-axe. Mr. Robert Riddell describes two such weapons, figured in the Archæologia.[3] They were found in a moss near Terregles, Dumfriesshire, and measure each two and a half feet long, and above two inches thick at the back, though greatly corroded with rust. The Kilbride discoverers, on finding the urn, had confidently anticipated that its contents would prove a golden treasure, which they magnanimously resolved should be equitably divided. Having gulped down their mortification as best they might on finding their whole treasure dwindle to an old iron bill, "it was at length unanimously agreed that it should not be sold; it might, for anything they knew, be uncommonly ominous, especially as it was iron, and taken out of a grave which was generally believed to be haunted." So the desired division of the spoil was at

[1] Archæologia, vol. iii. p. 39.

[2] Ure's Rutherglen and Kilbride, p. 159.

[3] Archæologia, vol. x. Pl. XL.

length secured by having the curious relic converted into *tackets* or hobnails for their shoes![1]

The general character of the older Scottish superstitions in regard to iron, of which we have here some indications, more frequently refer to it rather as a charm against spells and malign influences of all sorts, entirely corresponding in this respect with the popular creed of Norway at the present day. In describing the "Adder Stone," Ure remarks, "It is thought by superstitious people to possess many wonderful properties. It is used as a charm to insure prosperity, and to prevent the malicious attacks of evil spirits. In this case, it must be closely kept in an iron box to secure it from the fairies, who are supposed to have an utter abhorrence at iron." This may be compared with another canon of northern folk-lore, referred to in a former chapter,[2] in relation to the flint arrow-head or elf-bolt. The inferences suggested by both are the same, pointing to an epoch when iron, as a novel introduction, could in no way be associated with the Elves and Gnomes, old as the primitive stone weapons of the aborigines. Pennant, however, describes a curious charm against witchcraft, in use in the Hebrides, where the milk of enchanted kine is boiled along with both flints and untempered steel—the bane and the antidote—which was held to give the operator complete power over the enchanter. We are still familiar with the rustic faith in the efficiency of the iron horse-shoe affixed to the stable-door as a certain protection against all supernatural evil influences.

A remarkable class of urns, so far as I yet know peculiar to Scotland, appears to belong for the most part to the Iron Period. They vary in form, but all agree in the singular characteristic of being open at both ends. One of these was discovered within the area of a stone circle at Barrach, Aberdeenshire, by a peasant digging for stones. It lay under a flat stone, with another placed below it, and was found to be filled with human bones.[3] Others are described in the old Statistical Reports as resembling chimney cans. But the most minute account of this singular class of sepulchral urns is furnished by Ure, to whose indefatigable researches within the limited district of which he has treated we owe so many valuable reminiscences of bygone discoveries. "In the bottom of a very small cairn on the lands of East Rogertoun, the property of his Grace the Duke of Hamilton, were found five urns not of the ordinary shape. They were

[1] Ure's Rutherglen and Kilbride, p. 212. [2] *Ante*, p. 125. [3] Scot. Mag. 1772, p. 581.

about eighteen inches high; six wide at the one end and four at the other. Both ends were open. They were said by the workmen to be glazed, and ornamented with flowers; and narrower in the middle than at either end. They stood upon smooth stones distant from each other about three-quarters of a yard, and placed in a circular form. The top of each urn was covered with a thin piece of stone. They were all totally destroyed by the rustic labourers." Such is the lamentable yet ever-recurring history of our national antiquities. Vallancey has engraved a very beautiful bronze vase, dug up in 1769, near the church of Fahan, county of Donegal. The handles are horses' heads, very closely corresponding to the usual artistic style of this period; and the vase has the same remarkable peculiarity as the class of Scottish urns referred to, in being open at both ends.[1]

The iron relics of the Teutonic Period by no means yield the same amount of information as we have been able to derive from the older weapons and implements of bronze, chiefly owing to the extreme susceptibility of the newer metal to oxidation under nearly all the circumstances in which both classes of antiquities are discovered. This want, however, we shall find abundantly supplied from other sources, including the contemporary works in bronze. Among the most characteristic remains of the defensive armour of this period frequently met with, the umbones of shields occupy a prominent place. The larger ones are of sufficient size to admit the hand, and resemble in this, as well as in other respects, those frequently met with in England. They suffice to shew that the shield was not worn on the arm like the Roman clypeus, but held by a bar crossing the centre of the projecting boss, the hollow of which received and protected the hand. In this it closely corresponded to the bronze buckler of the previous period, which probably continued to be used contemporarily with it. An example of an iron umbo found in Morayshire is figured on a subsequent page. Another, referred to in a brief summary given in the Nenia Britannica, of relics found at Westray, Orkney, is described as "a very small iron vessel like a head-piece, only four and a half inches in the hollow, bruised apparently by a sword or an axe." In the Scottish Museum is a small iron boss, found at Corbiehall, near Carstairs, Lanarkshire, which is only slightly raised in the centre. The locality where it was discovered has furnished many Roman remains, among which it most probably ought

[1] Collect. de Reb. Hibern. No. XIII. p. 71, Pl. XIII.

to be classed. In general form it closely resembles an exceedingly beautiful boss of a Roman shield in the same collection, made of bronze, and decorated in relief with a crowned female figure seated, holding Victory in her hand, and surrounded with the spoils of war.

A rarer and more remarkable object pertaining to this period is the iron sword, inclosed in its bronze sheath, several very fine examples of which have been found at different times. One of these occurred in the very valuable collection of antiquities discovered at Stanwich, now deposited in the British Museum. Another similar example, found on a moor near Flasby, parish Gargrave, in the West Riding of Yorkshire, was exhibited during the meeting of the Archæological Institute at York in 1846. In both of these the iron blade of the sword was still inclosed in the sheath. The annexed illustration is copied from a very perfect bronze scabbard closely resembling the two found in England, now in the Museum of the Society of Antiquaries of Scotland. It appears from an inscription roughly scratched on it to have been found on the Mortonhall estate, at the foot of the Pentland Hills, in the immediate vicinity of the Scottish capital. The blade of this sword must have measured twenty-two and a half inches in length by one inch in breadth,—an exceedingly small and light weapon compared with the *enormes gladii* which Tacitus describes the Caledonians as using. It appears to have been a straight two-edged weapon, with a sharp point, and was perhaps designedly adapted for more convenient and ready use by the charioteer than the more ponderous sword generally borne by the native Britons. The different examples which have been heretofore noted are furnished with the same large bronze loop which is shewn in the woodcut, attached to the middle of the scabbard, the precise use of which is not quite apparent. The style of ornament entirely corresponds to that employed in decorating the personal ornaments and the horse-furniture of this period, and supplies evidence of a remarkable change from the undefined ornamentation of the Archaic works in bronze.

CHAPTER V.

PERSONAL ORNAMENTS.

It has been already noticed that silver appears to have been a metal very little known in Britain, or the north of Europe, prior to the changes which we associate with the introduction of iron; nor is it difficult, as we have seen, to account for this. The rarity of iron during the primitive periods arises chiefly from the occurrence of the ore in a form least resembling metal, and requiring the most laborious and difficult processes to reduce it to a state fit for use; while the absence of silver is no less satisfactorily accounted for from the mining operations requisite for reaching the argentiferous veins, which were only possible when the introduction of the more useful metals had supplied an abundance of the requisite tools. One class of the earliest silver ornaments, however, retains the same primitive and indefinite style of decoration which has already been described as occurring on the pottery, and also on some of the bronze and gold ornaments found in the tumuli. A very valuable series of examples of this type are figured in the Archæological Journal, in illustration of an account by Mr. Hawkins of the discovery of a number of armlets, and various other silver relics, at Cuerdale, near Preston, along with Anglo-Saxon, Cufic, and other coins.

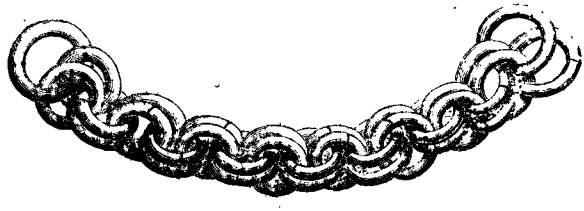
In the month of November 1830, some labourers engaged in digging for stones, in a field near Quendale, Orkney, came upon the remains of an old building, and, in digging among the rubbish, they found a decayed horn, which appeared to have been wrapped up in a piece of cloth, but the whole crumbled to pieces on exposure to the air. On the outside of the horn were what were at first supposed to be metal

hoops, but which proved to be six silver bracelets. They were penannular, and tapered nearly to a point at the ends. The largest of them were square, and ornamented with a kind of herring-bone pattern; the remainder were round. The weight of the heaviest was nearly six ounces, that of the least one ounce, and one which weighed nearly one and a-half ounce, had silver wire coiled round it. Within the horn were pieces of other bracelets, and a quantity of Anglo-Saxon silver coins, including those of Ethered, Athelstan, Edwg, Eadgar, and Ethelred; and alongside were also discovered several broken stone basins. A few of the coins were preserved, but the armillæ, and the remainder of the hoard, were disposed of to a goldsmith in Lerwick, and melted down. Slight sketches of the armillæ, and a deposition taken before the sheriff-substitute of Zetland by the discoverers, are deposited in the library of the Society of Antiquaries of Scotland. Barry describes another hoard extremely similar to this, found at Caldale near Kirkwall. Two horns were discovered by a man while digging peats: they contained about three hundred silver coins of Canute the Great, and near them lay "several pieces of fine silver, in the form of crescents or fibulæ, differing from one another a good deal, both in figure and dimensions. Some of them were flat, others angled; some round, some nearly met at the ends; others were wider at the extremities; one resembled in shape the staple of a door, and another a loop for hanging clothes upon."[1] A portion of the coins alone escaped the usual fate of British relics of the precious metals. A silver armilla, of the same type as those discovered at Cuerdale, was found, in the year 1756, in a cist, along with a quantity of burnt human bones, underneath a large cairn at Blackerne, Kirkcudbrightshire, when the stones composing the cairn were taken to inclose a plantation. It is now in the Museum of the Scottish Antiquaries. A silver bracelet, of a rarer and more artistic design, was found at Brough Head, Morayshire, by labourers engaged in digging the foundation for a new house, and is figured of the full size in the Archæologia Scotica.[2] The woodcut represents another remarkable Scottish relic, a massive silver chain, found in the year 1808, near Inverness, in the course of the excavations for the Caledonian Canal. It now forms one of the most valued treasures of the Museum of the Scottish Antiquaries. It weighs a little more than ninety-three ounces, and each link is open, and only bent together, so that it may

[1] Barry's Orkney, p. 225.

[2] Vol. iii. Plate v.

perhaps be assumed with considerable probability, that it was designed to be used in barter, being in fact silver ring money. There



Silver Chain, Caledonian Canal.

are thirty-three links in all, each of them measuring one and nine-tenths inches in diameter, and about two-fifths of an inch in thickness, excepting two at one extremity, and one at the other, each of which are two and one-fifth inches in diameter. With this exception the links appear to be of uniform size, and would probably be found to correspond in weight. An additional link, which was in an imperfect state, was destroyed by the original discoverers, in an attempt to ascertain the nature of the metal. Another silver chain is described in the New Statistical Account, which was found within the area of an intrenched camp, about two miles above Greenlaw, Berwickshire, at the confluence of the Blackadder and Faungrass rivers.

Reference has already been made to the discovery of nine lunar ornaments of silver, on opening one of the great tumuli, or Knowes of Brogar, at Stennis, in Orkney. Notices of fibulæ, and other relics of the same metal, are to be found scattered through the Statistical Accounts, but mostly described in such vague terms as to render them of little avail to the archæologist. The information is usually added that they were immediately concealed or destroyed. A rude chain, now in my own possession, was found during the present season in the Isle of Skye; two of the links are of silver, and the third of bronze. It corresponds to relics composed of fragments of rings broken in pieces for the purpose of exchange, with which both British and Scandinavian antiquaries are familiar. They are not uncommonly linked together, as in the example now referred to.

The bronze relics of this period are much more abundant, and here it is that we, for the first time, come in contact with examples bearing undoubted traces of Scandinavian art, though these belong more

correctly to the succeeding era, and will be treated of in detail, among objects of the primitive Christian Period of Scotland. The distinguishing characteristic of the ornamentation of the last Pagan era, as has already been remarked, is its definiteness and positive development of a peculiar style, along with the imitation of natural forms. A very great similarity, however, is traceable in the ornamentation of the whole northern races of Europe throughout a very considerable period; and in numerous cases it is only by a careful discrimination of details, or from some well-defined objects peculiar to certain districts or countries, that we are able to assign a specific epoch or nationality to discoveries. The interlaced ornament, or "runic knot-work," as it is customary to call it, is not unfrequently referred to as of Scandinavian origin; but of this there is not the slightest evidence.[1] It was familiar to the Greeks and Romans, and in its classic forms is known to architects by the term *Guilloche*, borrowed from the French. A beautiful and early example of its use occurs on the torus of the Ionic columns of the Erectheum at Athens. It pertains, in like manner, to Scandinavian, Anglo-Saxon, Irish and Scottish Celtic art, and more or less to that of all the Northern races of the last Pagan era; while it forms a no less characteristic ornament of early Christian art. In Scotland especially it is the commonest decoration of a very remarkable class of monuments, more particularly referred to hereafter, but of which it is sufficient meanwhile to say that they do not occur, so far as I am aware, in any part of the Hebrides, or in the Orkney and Shetland Islands, where the Scandinavian influence was longest predominant in Scotland, and its relics are still most frequently found. The suggestive source of the beautiful interlaced patterns may be very naturally traced, as in the ornamentation of the earlier pottery, to the knitting and netting of the primitive industrial arts; nor is it at all necessary to assume that it was introduced from Greece to the north of Europe, though it is found, to a certain extent, common to both. But, indeed, many of the earlier decorations of the Scandinavian Bronze Period are also to be found in use by the Romans. The annular ornaments figured in the Guide to Northern Archæology occur on almost every Anglo-Roman patella; the spiral and double spiral ornaments are both frequently met with on mosaics; and an urn, shewn in the same work, is surrounded with

[1] The term *Runic knot*, as thus applied to the interlaced ornament, is a ridiculous misnomer, which, if it has any meaning, must signify the Alphabet knot!

one of the simplest varieties of the *frette*, a still more familiar classic pattern.[1] The only essentially characteristic ornaments of the arts of the northern European races are the serpentine and dragon patterns. In so far as these are not the obvious creations of fancy, they are clearly traceable to an eastern source, the traditions of which, it will be seen, are even more obvious in monuments of Scottish than of Scandinavian art.

So much has been already said in reference to the legitimate conclusions deducible from the various relics of primitive art, that it will now suffice to indicate a few of the objects most characteristic of this period. One of the most familiar of these is the snake bracelet. Examples of it have been very frequently found in Scotland, and several very fine ones are preserved in the Museum of the Scottish Antiquaries. The annexed woodcut represents one of these, weighing thirty-one ounces. It was found at Pitalpin, near Dundee, in 1732, and bears considerable resemblance to another, and still more beautiful one, found, about the year 1823, among the sand-hills of Culbin, near the estuary of the river Findhorn, Morayshire. The circumstances attending the discovery of the latter are thus narrated by Sir Thomas Dick Lauder, in a communication which accompanied a drawing of it exhibited to the Society of Antiquaries of Scotland:—"Some of the sand-hills of Culbin are a hundred feet in perpendicular height; but the material composing them being an extremely comminuted granite sand, is so loose and light, that, except in a dead calm, it is in eternal motion, so that parts of the original soil are laid entirely bare. Though flints are not included in the mineralogical list of this country, yet there is one small spot among the sand-hills where flinty fragments are often picked up; and as elf-bolts, or flint arrowheads, have been not unfrequently found on this spot, it is supposed that a manufactory of those rude aboriginal weapons may have once existed there. The finder having accidentally lost his gun-flint, went to the spot to look for a flint to replace it, and in searching about he dis-

[1] Guide to Northern Archæology, pp. 43, 70.

covered the antique."[1] The weight of the bracelet is two pounds nine ounces avoirdupois, and the form of the snake-heads, with which both ends terminate, seems to indicate that they have been originally jewelled. It can hardly be supposed that either of the above beautiful, but ponderous ornaments, were designed to be worn on the wrist. Such a weight would cumber the sword-arm of the most athletic hero; and this is still further confirmed by the form of the example found at Pitalpin, the inner edges of which are so sharp that they would not only gall the arm, but would even be apt to wound it on any violent action. Such ponderous bracelets were, in all probability, honorary gifts or votive offerings, though there is also reason to believe that they may have been regarded in the same light as the Scandinavian sacramental rings previously referred to. A very remarkable passage in illustration of this occurs in the Saxon Chronicle, A.D. 876, where it is recorded that when the Danes made peace with Alfred, at Wareham in Wessex, they gave him the noblest amongst them as hostages, and swore oaths to him upon the holy bracelet. (Halza Beage.)[2] Examples, however, of bronze snake bracelets of lighter weight, and evidently designed to be worn, are of more frequent occurrence. In 1833 there were exhibited at a meeting of the Society of Scottish Antiquaries, two bronze bracelets in the shape of serpents, found in the district of Bunrannoch, Perthshire, on the northern declivity of the mountain Schehallion. The one weighed one pound two ounces, the other, one pound fourteen and a-half ounces avoirdupois, and they are described as similar to the armilla found at Findhorn.[3] Another example in the Society's Museum, covered with verd antique, is a light and beautiful bracelet, of the same type, weighing only ten ounces.

Among the earliest definite forms of Northern art, the serpent or dragon is the most common subject adopted for direct imitation, or as a suggestive basis for the play of fancy, by the primitive artist. The woodcut represents a singular bronze ornament in the Mu-

[1] Archæol. Scot. vol. iii. p. 99. It is engraved in a superior style in Archæologia, vol. xxii. Plate xxxv.

[2] Chron. Sax. edit Gibs. p. 83, quoted by H. Ellis, Esq., Archæol. vol. xxii. p. 292.

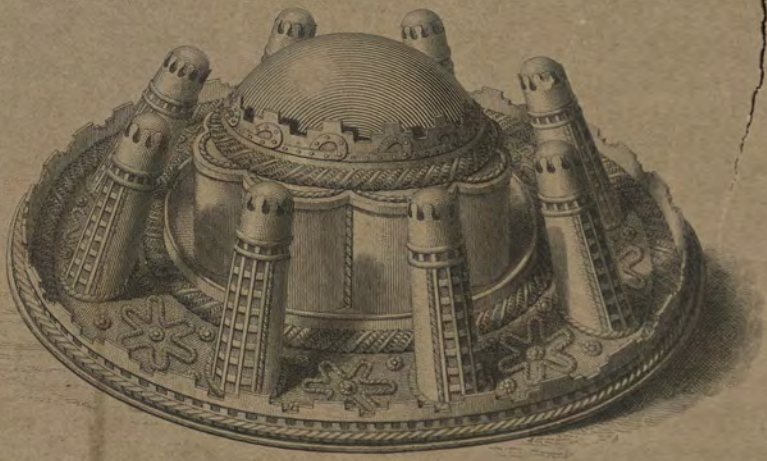
[3] Minutes of S.A. Scot., April 22, 1833.

seum of the Scottish Antiquaries, the history of which is uncertain, though its style of workmanship completely accords with that of other well-known native relics. It is figured about one-third the size of the original. The protuberances on the snake-formed bracelets and other relics, evidently designed originally to represent the scales of the serpent, appear to have latterly become a conventional ornament, and are to be found on bronze relics unaccompanied by any more defined features of the snake or dragon. The annexed woodcut represents a very curious bronze relic in the Scottish Museum, whereon the triple snake-like form and scales are represented, but without the head or any more distinct characteristic of the reptile. It measures five inches in its greatest diameter, exclusive of the projecting scale-like ornaments. The exact locality where it was found has not been noted; but another example in the same collection, a little smaller in size, is believed to have been dug up in Argyleshire. It measures externally four and four-fifths inches in greatest diameter. Its most probable use is as a decoration of the arm, or possibly as a neck ornament; but it is quite inflexible, and if worn on the neck must have been permanently affixed to the inheritor of this cumbrous badge of honour. The larger of the two, which is figured here, weighs fully two pounds avoirdupois.

Of the commoner forms of torcs, head-rings, armlets, and other personal ornaments of this period, examples are not rare in Scotland, though the want of any efficient system for securing them from destruction, when of the precious metals, or of being buried in private collections and almost as effectually lost for nearly all useful purposes, renders it difficult to obtain accurate accounts of the great majority of discoveries. Some of the simpler bronze torcs and head-rings have already been described among the relics of the Archaic Period. But one of the most beautiful neck ornaments ever found in Scotland is a beaded torc discovered by a labourer while cutting turf in Lochar Moss, Dumfriesshire, about two miles to the north of Cumlongan Castle; and exhibited by Mr. Thomas Gray of Liver-

ASIATIC SOCIETY

diameter 6 Inches



BRONZE HEADED TORQUE [illegible]

AND

BROOCH OF IRON

pool at the York Meeting of the Archæological Institute. It is engraved on *Plate* III., along with the bronze vessel in which it was inclosed. The beads, which measure rather more than an inch in diameter, are boldly ribbed and grooved longitudinally. Between every two ribbed beads there is a small flat one formed like the wheel of a pulley, or the vertebral bone of a fish. The portion which must have passed round the nape of the neck is flat and smooth on the inner edge, but chased on the upper side in an elegant incised pattern corresponding to the ornamentation already described as characteristic of this period, and bearing some resemblance to that on the beautiful bronze diadem found at Stitchel in Roxburghshire, figured on a subsequent page. The beads are disconnected, having apparently been strung upon a metal wire, as was the case in another example found in the neighbourhood of Worcester. A waved ornament chased along the outer edge of the solid piece seems to have been designed in imitation of a cord; the last tradition, as it were, of the string with which the older necklace of shale or jet was secured. Altogether this example of the class of neck ornaments to which Mr. Birch has assigned the appropriate name of Beaded Torcs, furnishes an exceedingly interesting illustration of the development of imitative design, in contradistinction to the more simple and archaic funicular torc, which, though continued in use down to a late period, pertains to the epoch of primitive art.

Various other personal ornaments have been discovered in Scotland, manifestly belonging to this later era when artistic design had been fully developed, and its works were characterized by a well-defined style. Of one of the most remarkable of these a drawing has fortunately been preserved, made to illustrate a communication to the Scottish Society of Antiquaries in 1787, though the original, it is to be feared, must no longer be sought for. The cairn in which the relic was found is thus described: "At Cluinmore, near Blair-Atholl, there is a beautiful green cairn, called Sithain-na-Cluana, *i.e.*, the Fairy Hill of Clune. It is about twenty paces high obliquely, and about one hundred and twenty paces in circumference. Upon the top of it there are the two side stones of the altar still remaining, upon which there are engraven some hieroglyphics, so much defaced that they are not readable unless the stones were turned over and narrowly examined."[1] A rough square outline is marked, "the urn, now open,

[1] MS. Soc. Antiq. Scot., read May 1, 1787.

1½ ft. long;" and following it is the sketch, of which the annexed woodcut is an exact copy, of the same size. It is described as the "Large bronze ring found in the cairn of Clunemore." Rings of a similar character to this, though differing greatly in their details, have been frequently found in Denmark, and various fine examples are preserved in the valuable collection at Copenhagen. But the most remarkable feature of this very curious relic is the hooded snake's head which terminates one of the ends, the other having been most probably finished in like manner. It appears to have almost exactly corresponded to those on the large snake bracelet found near Findhorn, and like it seems to have been jewelled. Objects of this class are named by the Danish antiquaries, Rings for the Hair. A comparison of this example, with one engraved in Mr. Thom's edition of Mr. Worsaae's Primeval Antiquities, (p. 34,) will best illustrate their general resemblance, and the very marked difference of their details. Whether we assume it to have been designed as an ornament for the head or the neck, the Clunemore ring, with its singular snake-head finials, could not fail to prove a very striking article of personal adornment. Besides these hair-rings, the Danish tumuli furnish numerous gold and bronze bands, diadem and coronet shaped ornaments, and other head-dresses, nothing similar to which are known in this country. Various examples of these are engraved both by Lord Ellesmere and Mr Worsaae, including a very remarkable one figured in the Primeval Antiquities, which was found a few years since in the neighbourhood of Haderslev, and has an inscription engraved on the inner side, in Runic characters, supposed to denote the name of the original possessor. Other rings which occur among Scandinavian sepulchral deposits are classified by Danish antiquaries among articles supposed to have been connected with Pagan worship. These include several varieties of penannular rings not greatly differing in general form from the British gold relics already described under that name. But besides these there are others of a much larger size, one of which, figured by

Ring for Hair, Cairn of Clunemore.

Worsaae, is described as "a large ring or girdle of massive gold mixed with silver, which is rivetted together in the middle of the front, and is conceived to have been the ornament of an idol; for it can scarcely be supposed that any human being could have constantly worn such a ring."[1]

The woodcut represents an exceedingly beautiful bronze relic, apparently of the class of head rings, in the collection of the Society of Antiquaries of Scotland, which was discovered in the year 1747, about seven feet below the surface, when digging for a well, at the east end of the village of Stitchel, in the county of Roxburgh. It bears a resemblance in some respects to relics of the same class in the Christiansborg Palace, yet nothing exactly similar to it has yet been found among Scandinavian relics; while some of its ornamental details closely correspond to those which characterize the British horse furniture and other native relics of this period. One of its most remarkable peculiarities is, that it opens and shuts by means of a hinge, being clasped when closed by a pin which passes through a double catch at the line intersecting the ornament; and so perfect is it that it can still be opened and secured with ease. It is probable that this also should rank among the ornaments of the head, though it differs in some important respects from any other object of the same class. The oval which it forms is not only too small to encircle the head, but it will be observed from the engraving that its greatest length is from side to side, the internal measurements being five and nine-tenth inches by five and one-tenth inches.

Head-Ring, Roxburghshire.

Montfaucon, Vallancey, and other continental and Irish antiquaries, have traced the original of the lunar head-ornaments to the well-known head-dress so common in Egyptian sculpture, and, following

[1] Primeval Antiquities, p. 64.

out their favourite Druidical theories, have assumed them to be the special badge of the Druid priests.[1] There are not wanting, however, traces of ancient customs among the races of Northern Europe which would lead us rather to assign them as a part of female adornment, as Mr. Birch has already done to the analogous gorgets, so nearly resembling them in form.[2] The maiden coronet, or tire for the hair, in use among the northern races of Europe, and its correspondence to the snood or cockernonie of Scottish maidens, are very happy illustrated in Mr. Robert Jamieson's notes to "Child Axelvold." One of the most touching passages of the old northern ballad derives its chief beauty from the allusion to the ancient usage of the maiden head-dress,—

> "Lang stuid she, the proud Elinè,
> Nor answer'd ever a word;
> Her cheeks sae richly-red afore,
> Grew haw as ony eard.
> She doffed her studded stemmiger,
> And will of rede she stuid:
> 'I bure nae bairn, sae help me God,
> But and our Lady gude!'"

To *tyne her snood* is still a sufficiently intelligible phrase in Scotland for the loss which forfeits the privileges of a maiden, without admitting to those of a matron. The Greek poets also abound with allusions to the nuptial ceremony of taking off the bride's coronet,[4] and the Jews still preserve a similar usage; so that in this, as in so many other northern customs, we recover additional traditions of the Asiatic origin of the Teutonic races.

[1] Collect. de Reb. Hiber. No. xiii. p. 70.

[2] Archæol. Journal, vol. iii. p. 35.

[3] Illustrations of Northern Antiquities, p. 354.

[4] "The translators of the Greek poets generally interpret *μίτρη* by the *zone* or girdle, (of plaited rushes,) which among the Greeks and Romans was not properly a virgin zone, because it was to be worn by the wife till it became too short."—"In later times the unbinding the coronet and unbuckling the girdle, in putting the bride to bed, were so nearly connected with each other, that the zone and coronet were sometimes put for each other, and *μίτρη* applied to the former, as in the *Argon.* of Apoll. Rhod. b. 2. l. 287:—

> ———ᾧ ἔπι μούνῳ
> Μίτρην πρῶτον ἔλυσα καὶ ὕστατον."

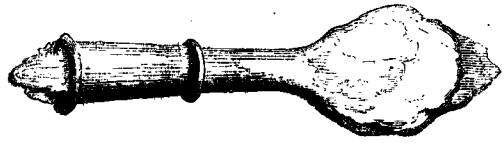
—R. Jamieson's notes to Child Axelvold.

CHAPTER VI.

SEPULCHRES OF THE IRON PERIOD.

THE descriptions already given of the circumstances under which objects belonging to this era have been found, have supplied some sufficiently characteristic illustrations of the sepulchral rites of the period. Very few well-defined examples, however, of tombs of the era immediately preceding the introduction of Christianity have yet fallen under the notice of observers competent to furnish a satisfactory report of their appearance, or of the peculiarities which have marked the mode of interment in Scotland during this last Pagan age. They are indeed comparatively rare, arising, in part at least, from the period having been one probably of greatly shorter duration than those which have been previously considered; but also we may assume, from increasing civilisation having limited the sepulchral honours of the cairn, or the huge barrow, with its costly deposits, to a very few of the most distinguished chiefs. This latter conclusion receives ample confirmation from many cists found without any superincumbent heap, the contents of which, though of little moment, frequently suffice to connect them with the age of iron. To those tombs of this period, already referred to in previous chapters, one or two additional examples of special interest, however, remain still to be added. Lieutenant-Colonel Miller thus describes a discovery made on his estate of Urquhart, Fifeshire, in the autumn of 1832:—"In trenching the ground within about three hundred yards of Melford, on the Eden, I came upon the remains of two cairns, adjoining which was dug up a spear-head. It was under the root of a tree about an hundred years old, about three feet under the surface, and is the only

one of iron that I have met with." The spear-head, which is figured here, measures, in its present imperfect state, only six and a half inches long. The Colonel also describes a dagger, which had very much the appearance of a breakfast knife, but was completely oxidized. There was dug up along with these a small vase, quite entire when found, and in form somewhat resembling a tea-cup, but which was carelessly left on the ground, and broken in the course of subsequent operations. Besides this, several pieces of pottery were met with, one of the thickest of which was strongly vitrified, and also a bronze fibula, and a considerable quantity of bones and ashes.[1] In another cairn, called Gaskhill, near the village of Collessie, in the same county, there was discovered, a few years since, an iron sword, now preserved at Kinloch House. Though greatly corroded, its original form is still sufficiently distinguishable. It measures fully eighteen inches in length, with one edge, returned from the point a short way on the back; differing in this respect from the pointless sword of the ancient Caledonian, as described by Tacitus, though corresponding to other examples found in Scotland, such as those already referred to, which were discovered in the parish of Cummertrees, Dumfriesshire, in 1834. In the course of the following year, a large tumulus on the farm of Dasholm, near Garscube, Dumbartonshire, was partially demolished, within which was a stone-chamber containing a bronze or copper relic, described as the visor of a helmet, with a spear-head, the blade of a sword, two small picks, and various other relics, all of iron, but concerning the original use of many of which the discoverers could form no idea.[2] The tumulus has been only very partially explored, and it is not improbable that it may furnish equally interesting contents to some future excavator. In 1836, another large tumulus was opened in the neighbourhood of the Clyde Iron Works, Lanarkshire, which contained, besides two cinerary urns filled with ashes, two bronze bridle-bits, and various other relics, supposed to have formed portions of horse furniture. The relics included in the latter class may justly rank among the most interesting remains peculiar to the Iron Period.



[1] MS. Letter, S.A. Scot., Dec. 1832.

[2] New Statist. Acc. vol. viii. p. 48.

We know from the accounts of the Roman historians, that when the invading army of Agricola was withstood by the united forces of the Caledonians, one of their most formidable provisions for assailing the legions was the native war-chariot. The incidents preserved to us in the narrative of that memorable campaign of the Roman general, furnish the chief historical evidence we now possess of the degree of civilisation to which the native tribes of North Britain had attained at the period when they came into direct collision with the disciplined veterans of Agricola's army. But the most favourable view of the progress then attained by the natives which can be deduced from the allusions of classic historians, is amply borne out by contemporary archæological evidence. The union of so large a force under one native leader for the purpose of withstanding the general enemy, is in itself no slight evidence of an advanced social civilisation. We learn, moreover, that the British warrior had subdued and trained the horse to his service, and was accustomed to yoke it to the war-chariot; an ingenious and complicated piece of workmanship, requiring no slight mastery of the mechanical arts to execute.

This is perhaps the most important characteristic of the last Pagan era which the tumuli reveal to us; while we discover from them also the remarkable fact, that in the sepulchral rites accorded to the most honoured dead, not only the warrior's weapons, but even his chariot and horses, were sometimes interred beside him, not improbably with the idea that they might still suffice for his use in the strange Elysium whither the thoughts of survivors followed their departed chief. The horns of the deer, and other remains of the spoils of the chase, are frequently found in the older tumuli, with also occasionally the skeleton of the dog lying beside that of the hunter. But it is only in this last period when we have reason to believe the Teutonic colonists had brought with them to the British Isles many new arts and customs, that we clearly trace the remains of the horse, or find the relics of the war-chariot among the contents of the tomb, or beside the urn.

The researches of the geologist establish beyond doubt that the wild horse was a native of the British Islands prior to their occupation by the earliest Allophylian colonists, and even prove the existence of several species. "The best authenticated associations of bones of the extremities, with jaws and teeth, clearly indicate that the fossil-

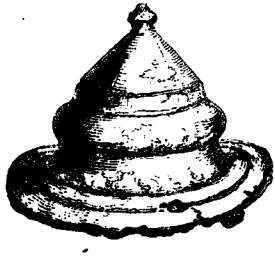
horse had a larger head than the domesticated races; resembling in this respect the wild horses of Asia described by Pallas."[1] A smaller species of *Equus*, the *Asinus fossilis*, is also found in the more recent or diluvial formations, along with existing as well as extinct species. Professor Owen remarks,—"From the peculiar and well marked specific distinction of the primogenial or slender-legged horses, (*Hippotherium*,) which ranged from Central Europe to the then rising chain of the Himalayan Mountains, it is most probable that they would have been as little available for the service of civilized man as is the zebra or the wild ass of the present day; and we can as little infer the docility of the later or pliocene species, *Equus plicidens*, and *Equus fossilis*, the only ones hitherto detected in Britain, from any characters deducible from their known fossil remains. There are many specimens, however, that cannot be satisfactorily distinguished from the corresponding parts of the existing species, *Equus caballus*, which, with the wild ass, may be the sole existing survivors of the numerous representatives of the genus *Equus* in the Europæo Asiatic continent."[2] Whether any of the fossil species existed at the period of earliest colonization in Britain is still open to question; but the occasional discovery of teeth and bones of the horse, along with the culinary debris of the Scottish weems and other primitive dwellings, seems to indicate its existence here among the British Fauna prior to its domestication and training for the Caledonian war-chariot.

A very curious discovery of the tomb of a British charioteer, with the skeleton of his horse, was made in the year 1829, in the neighbourhood of Ballindalloch, a small post-town in the county of Moray. It is thus communicated in a letter to the secretary of the Society of Antiquaries of Scotland:—"A labourer in digging for moor-stones here, a few weeks since, on a moor about a mile from Ballindalloch, found at a depth of above a foot from the surface, a quantity of bones, among which appear to have been a human skeleton, and also the skull and bones of a horse. The whole had been covered up, to my great regret, before I heard of it; but the labourer tells me that there were a quantity of rings and bits of iron, one of them like a great hoop: but all completely rusted. I have been fortunate enough to get hold of what I take to be the bridle [bit] of the horse, two bronze rings, joined by a double link of iron, and also some bronze rings which may have belonged to its harness. There were also some

[1] Owen's British Fossil Mammalia, p. 385.

[2] Ibid. p. 397.

bits of wood, oak I find it to be from a fragment I have; but it was all too much decayed to tell what it had been."[1] The letter is accompanied with a sketch of what is described as "a curious little iron cup found in the grave." It is shewn in the annexed woodcut, and will be at once recognised by the archæologist as the umbo which formed the centre of the shield, and received and protected the hand of its wearer. The fragments of oak found along with it may have also included part of the shield, as well as portions of the war-chariot. Scarcely a doubt can be entertained that in this discovery we have one of the rare examples of the tomb of a British chief, with his arms and his chariot and steed laid beside him,—a piece of wild barbarian pomp which puts all the modern "boast of heraldry" to shame. A bridle-bit in the Museum of the Scottish Antiquaries, which answers closely to the above description, was found in 1822, along with the remains of the horse and rider, about two feet below the surface, in levelling May Street, in the New Town of Largs; and was accordingly assumed as a relic of the celebrated battle fought there with the Norwegian king, Haco, in 1263.[2] It consists of two plain bronze rings, measuring each three and three-quarter inches in diameter, and united by a double link of iron.



Independently of the great interest which justly attaches to the British war-chariot, as an evidence of skill and of considerable progress in civilisation, the horse furniture which usually accompanies it furnishes one of the most illustrative class of relics of the artistic skill of the period. Among these the bridle-bits have most frequently attracted attention. The examples found in Scotland differ in no very remarkable degree from those with which the archæologists both of England and Ireland are familiar. They consist generally of two large bronze rings, united by two or sometimes three links of the same metal. They are frequently highly ornamented, and the marks of later repair observable on many of them suffice to shew the great value attached to them. The beautiful example figured here, was found about the year 1785, in the bottom of a deep moss at the east end of Birrenswork Hill, Dumfriesshire, a locality rich in the remains

[1] MS. Letter, J. Stewart, Libr. S.A. Scot.

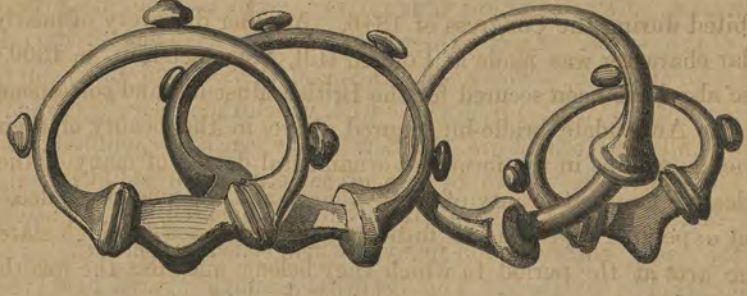
[2] MS. Letter, John Smith, Esq. of Swindrigemuir, to John Dillon, Esq., 28th March 1822. Libr. S.A. Scot.

of Roman and British arts, and where the traces both of Roman and native intrenchments are still visible. The outer diameter of the ring of the bridle-bit measures two and seven-tenth inches, and the orna-

Bronze Bridle-Bit Annandale.

mental appendages projecting into each ring still retain considerable traces of the red and blue enamel with which they have been filled. It must have been made for a small horse, as the centre piece measures somewhat less than two inches within the perforated loops. It appears to have been long in use. The large rings are much worn, and have been ingeniously repaired by rivetting a new piece to each. The small loops or eyes also attaching them to the bit have had a fresh coating of metal superadded where they were partially worn through.

A remarkable discovery of ornaments, bronze rings, bridle-bits, and other portions of horse furniture was made in a moss at Middleby, Annandale, in the year 1737. The whole of these were secured by the zealous Scottish antiquary, Sir John Clerk, and are still preserved, along with numerous other objects collected by him, at Penicuick



House. The bridle-bits, though plainer than the one figured above, are of the same type, and one of them corresponds to it in the want of uniformity of the two rings, which is probably to be accounted for from their being designed for a pair of charioteer's horses, the more

ornamental ring being designed for the outside, where it would be most exposed to view. The duplicate of this appears, from a note in the handwriting of Sir John Clerk attached to the example still preserved at Penicuick House, to have been presented by him to Mr. Roger Gale. Drawings of the principal objects of this valuable collection were forwarded to the Society of Antiquaries of London at the time of their discovery, by Sir John Clerk, and are still preserved.[1] One or two of the most remarkable objects found at Annandale are

figured here from the originals at Penicuick House. They are nearly identical in type with the collection of antiquities found within the extensive intrenchments at Stanwick, on the estate of the Duke of Northumberland, and since presented by His Grace to the British Museum. Some of the principal objects are engraved in the York volume of the Archæological Institute, the Stanwick relics having been exhibited during the Congress of 1846. Another discovery of nearly similar character was made at Polden Hill, Somersetshire, in 1800.[2] These also have been secured for the British Museum, and correspond with the Annandale bridle-bit, figured above, in the beauty of their enamel as well as in the form and ornamental details of many of the articles. The great beauty of these objects and the amount of decoration expended on the horse furniture, prove at once the high state of the arts at the period to which they belong, and also the wealth

[1] S. A. L. Collection of Drawings, vol. ii. p. 61. I am indebted to the obliging attention of Mr. Albert Way for learning of the existence of these drawings, as well as for sketches, which enabled me afterwards to identify the objects in the collection at Penicuick House. The original drawings are by no means minutely correct.

[2] Archæologia, vol. xiv. p. 90.

and luxury of the people, which enabled them to lavish such costly ornamentation even on their harness and the furnishings of their war-chariots. No account is known to have been preserved of the circumstances attending the interesting discovery at Middleby, but the place where they were found precludes the idea of their having belonged to a sepulchral deposit. By far the most ample notice we possess of one of the latter, affording a valuable illustration of the precise use of the objects of antiquity described above, as well as of the rites and customs of their owners, occurs in an account of the opening of some barrows on the Wolds of Yorkshire, communicated to the Archæological Institute by the Rev. E. W. Stillingfleet, Vicar of South Cave, in that county. The following account of the contents of one of these, which proved to be the sepulchre of a British charioteer, is abridged from Mr. Stillingfleet's interesting narrative.

"The elevation of the barrow was uncertain, from its crown having being levelled; its diameter was from eight to nine yards. The cist was nearly a circle of eleven or twelve feet. In this cist, excavated to the depth of about a foot and a half in the chalky rock, and on a nearly smooth pavement, the skeleton of a British charioteer presented itself, surrounded by what in life formed the sources of his pride and delight, and no inconsiderable part of his possessions. The head of the charioteer was placed to the north with an eastern inclination. He rested on his back, his arms crossed on his breast, and his thigh and leg-bones appearing to have been crossed in opposite directions. Very near to his head were found the heads of two wild boars. Inclining from the skeleton, on each side, had been placed a wheel; the iron tire and ornaments of the nave only remaining. In diameter the wheels had been a trifle more than two feet eleven inches. The diameter of the ornaments of iron, plated with copper, which had encircled the nave as a kind of rim, was very nearly six inches. Each of the wheels had originally rested on a horse, the bones of which were found under or adjoining to them; the head of each horse being not far from that of the charioteer on opposite sides. From the size of their leg-bones these horses were of unequal height, but probably neither of them reached thirteen hands."

In the charioteer's cist were also found the bridle-bits, rings, buckles, and others of the metallic furnishings of the harness. Many of these objects closely correspond to those found both at Stanwick and in the Middleby Moss, leaving no room to question their native origin and workmanship, and thus freeing us from any uncertainty apparent in the communication by Sir John Clerk to the London Antiquaries, who has thus cautiously labelled his drawings,—"Horse-furniture found in a moss in Annandale in Scotland, *supposed to be Roman or old Danish, or British!*" The chariot and horses, as well as the personal orna-

ments and weapons of war, deposited beside the buried chief, were no mere idle funeral pomp, but destined for his use in a future world. Doubtless his faithful attendants anticipated, when lavishing such costly rites on his sepulture, that they were furnishing them for his entrance into the Valhalla of the Gods, proudly borne in the chariot in which he had been wont to charge amid the ranks of the enemy, and achieve such deeds of valour as form the highest attainments of barbarian virtue. It is to be remarked, however, that the articles found in the Yorkshire barrows differ from those discovered in Annandale, in being of iron plated with copper; whereas the latter appear to be entirely formed of bronze, and perhaps should, on this account, be assumed to be of a somewhat earlier date; unless, as is fully more probable, they mark a period when the use, or the full knowledge of the working of iron, was very partially diffused throughout the British islands, and when, therefore, the older and more familiar metal was still to be looked for among the more northern tribes.

It is obvious, from the various examples already cited, that much diversity existed in the modes of interment practised in Scotland during the last heathen period. The cairn and tumulus, the cist and cinerary urn, all occur accompanied with contemporary relics. The Danish antiquaries are able to refer to a definite period when cremation was abandoned for inhumation. But if the date assigned by Mr. Worsaae for the close of the Danish Bronze Period be correct, it very nearly corresponds with that of the introduction of Christianity into Scotland, when our later Iron Period came to a close. Perhaps it is to this closing period of the Pagan era that we shall most consistently refer the substitution of the earliest forms of rude oaken coffins for the primitive cist of stone. Mr. Worsaae has described the investigation of a remarkable barrow in 1827, at the village of Vollerslev, containing a cist hollowed out of a very thick oaken stem, about ten feet in length, within which was found the remains of a woollen mantle, a sword, dagger, palstave, and brooch of bronze, a horn comb, and a round wooden vessel with two handles. English archæologists are familiar with a corresponding oaken cist brought to light a few years since, on the opening of a tumulus at Gristhorpe, near Scarborough, within which lay a skeleton, and beside it a bronze spear-head, flint javelin and arrow heads, ornaments of bone, and a small shallow basket of wicker-work. The whole of these interesting relics are now

deposited in the Scarborough Museum. So far as this single example goes, it rather tends to connect the remarkable deposit with a much earlier period. It is referred to in Mr. Thom's interesting preface to the English edition of the Primeval Antiquities of Denmark, as, with one exception, the only discovery of the kind known to have taken place in England. Probably, however, such examples are less rare than is supposed. They have already been observed in more than one instance in Scotland, though little calculated to excite interest in the minds of those under whose observation unfortunately such discoveries most frequently come. On the removal of a tumulus, a few years since, on the estate of Cairngall, in the parish of Longside, Aberdeenshire, two such oaken cists were exposed. They are thus described by Mr. Roderick Gray:—"One of them was entire; the other was not. They had been hollowed out of solid trees, and measured each seven by two feet. The sides were parallel, and the ends were rounded, and had two projecting knobs to facilitate their carriage. The bark of the trees of which they had been formed remained on them, and was in the most perfect state of preservation. No vestige of bones was found in either of them. They had been covered over with slabs of wood, and lay east and west."[1] A more remarkable ancient sepulchre of somewhat similar character was discovered in the parish of Culsalmond, in the same county, in the month of May 1812. The following account of it is furnished by the Rev. F. Ellis:—

"In preparing a field for turnips, the plough, at a spot from which a large cairn of stones and moss had been removed about thirty years before, struck against something which impeded its progress. On examination this proved to be a wooden coffin of uncommon size, and of the rudest conceivable workmanship. It had been formed from the trunk of a huge oak, divided into three parts of unequal length, each of which had been split through the middle with wedges and stone axes, or perhaps separated with some red-hot instrument of stone, as the inside of the different pieces had somewhat the appearance of having been charred. The whole consisted of six parts,—two sides, two gables, a bottom, and a lid. Only a small part of the lid remained, the greater part of it having been splintered and torn up by the plough. The coffin lay due east and west,—the head of it being in the east end of the grave. The sides were sunk into the ground thirteen and a half inches below the bottom piece. In the middle of them were grooves of rough and incomplete workmanship, and of the same length at the bottom. The projecting parts of the sides rested on a hard substance much mixed with ashes which had undergone the action of a very strong fire, and on which part of the grave had evidently been erected the funeral pile. In a corner of the coffin was an urn which was broken

[1] New Statistical Account, vol. xii. p. 354.

in the digging out. It had been formed of a mixture of clay and sand; narrowest at bottom, very wide at the top, and about ten or eleven inches deep. After the different pieces were placed in the grave in their proper order, it appears to have been surrounded with a double row of unhewn stones."[1]

It was my good fortune to witness the exhumation during the present year of examples of this remarkable class of oaken cists, under circumstances of peculiar interest. In the course of constructing an immense reservoir on the Castlehill of Edinburgh for supplying the city with water, an excavation was made on this, the highest ground, and in the very heart of the ancient capital, to a depth of twenty-five feet.[2] After removing some buildings of the seventeenth century and several feet of soil, in which were found various coins of the Charleses and of James VI., a considerable portion of a massive stone wall was discovered, which there can be little doubt formed part of the defences of the city, erected by authority of James II., exactly four centuries before: A.D. 1450. Lower down, and entirely below the foundations of the ancient civic ramparts, the excavators came upon a bed of clay, and beneath this a thick layer of moss or decayed animal and vegetable matter, in which was found a coin of the Emperor Constantine, thus suggesting a date approximating to the beginning of the fourth century. Immediately underneath this were two coffins, each formed of a solid trunk of oak, measuring about six feet in length. They were rough and unshapen externally, as when hewn down in their native forest, and appeared to have been split open. But within they were hollowed out with considerable care, a circular space being formed for the head, and recesses for the arms; and indeed the interior of both bore considerable resemblance to what is usually seen in the stone coffins of the twelfth and thirteenth centuries. They lay nearly due east and west, with the heads towards the west. One of them contained a male and the other a female skeleton, unaccompanied by any weapons or other relics, but between the two coffins the skull and antlers of a gigantic deer were found, and alongside of them a portion of another horn, artificially cut, and most probably the head of the lance or spear with which the old hunter armed himself for the chase. The discovery of such primitive relics in the

[1] New Statist. Acco. vol. xii. p. 733.

[2] The excavation extended to a depth of fully thirty-three feet below the highest part of the area included within the reservoir, but at the point referred to in the text the lowest perpendicular depth was about twenty-five feet.

very heart of a scene of busy population, and the theatre of not a few memorable historical events, is even more calculated to awaken our interest, by the striking contrast which it presents, than when found beneath the lone sepulchral mound, or exposed by the chance operations of the agriculturist. An unsuccessful attempt was made to remove one of the coffins. Even the skulls were so much decayed that they went to pieces on being lifted, but the skull and horns of the deer found alongside of them are now deposited in the Museum of the Scottish Antiquaries. It is not altogether unworthy of notice here, as possibly indicating the Celtic origin of this early substitute for the primitive stone cist, that our term coffin appears to be derived from the Gaelic, *cobhan*, a coffer or wooden chest; Greek, *κοφινος*, a wicker-basket or coffer, though the more usual modern Gaelic name applied to the coffin is *ciste-mairbh*, or chest of the dead.

The great diversity in the later heathen sepulchral rites may be traced with much probability to the causes which have suggested the term Teutonic as most applicable to the period immediately preceding the introduction of Christianity. The isolation of the British Celtæ was at an end. Not only were the Teutonic races of the Continent effecting numerous settlements in the British Isles, and falling back on the more northern and purely Celtic tribes, as they were compelled to give way to the inroads of the Roman legions on their earlier scenes of colonization; but even where the Celtic population maintained their ground, we have abundant evidence that very extensive intercourse with the south was familiarizing them with the arts and civilisation of the continent of Europe. Such intercourse could not fail also to introduce to them many novel rites and superstitions such as are still traceable in the folk-lore of the whole Teutonic races. Numerous independent proofs unite in confirmation of the fact of an entirely new era having taken the place of the early Bronze Period. The uses and relative values of the metals had obviously been finally adjusted. The Scottish bridle-bit shews the adaptation of the iron for use and the bronze for ornament; and this is even more apparent in the plated harness of the British charioteer found on the wolds of Yorkshire. All the evidence concurs in shewing how great was the change that had taken place since the primitive metallurgist laboriously fashioned his weapons from the rare and costly bronze, still supplying numerous deficiencies with implements of horn and stone. The variety, moreover, in the sepulchral deposits, and in the character

of objects designed for the same purpose, is no less indicative of the important changes superinduced on primitive arts, than are the various modes of sepulture suggestive of a diversity of national customs and creeds, or of the indifference and scepticism which are the forerunners of change. Everything betokens the close of the long Pagan era which we have followed down from that remote dawn of archæological annals in which we catch the first dim traces of the aboriginal Briton mingled among alluvial relics of strange animal life, to the commencement of authentic written history and inscriptions, preparatory to a new period of which our own century forms a part.

PART IV.

THE CHRISTIAN PERIOD.

"Tantum ergo sacramentum
Veneremur cernui,
Et antiquum documentum
Novo cedat ritui,
Præstet fides supplementum
Sensuum defectui."

S. THOMÆ AQUINATIS
HYMNUS DE CORPORE CHRISTI.

CHAPTER I.—HISTORICAL DATA.

BY whatever course the earlier colonists of the British Isles reached our shores and diffused the first influences of the presence of man, as well as those succeeding evidences of his progress, the traces of which have been reviewed in the preceding sections, it is unquestionable that that latest and most important of all sources of change, the introduction of Christianity, took place by a very different route from that of the Straits of Dover. All the affinities indicated by the later and well-defined relics of native art point to a more intimate intercourse and community of customs and arts between the natives of Scotland and Ireland than between those of the northern and southern parts of the island of Great Britain, taking as its natural intermediate boundary the Highlands of Northumberland and Cumberland. South of this the tribes partook of the characteristics of those of the neighbouring continent. They shared in the civilisation of the north of Europe, held by its mythology, and were involved in

its enslavement by the aggressive expansion of the overgrown Roman empire; while the nations both of northern Albany and of the Irish isle were left to the unmitigated influences, for good or evil, of their wild independence. The geographical position of the British and Irish coasts sufficiently accounts for frequent intercourse between the natives of Scotland and Ireland from the earliest periods. While the narrowest part of St. George's Channel has a breadth of about sixty-five miles, the opposite coasts of the Mull of Cantyre and of Fair Head in the county of Antrim, are only fourteen miles apart. The remarkable ancient historical Gaelic poem, generally termed the ALBANIC DUAN, written in its present form in the reign of Malcolm Canmore about the middle of the eleventh century, thus refers to the first peopling of Scotland and the Irish origin of the northern Picts:—

"Ye learned of all Albin,
Ye wise, yellow-haired race,
Learn who was the first
To acquire the districts of Albin.

"Albanus acquired them with his race,
The illustrious son of Isiscon,
Brother to Britus, without treachery:
From him Albin of ships takes its name.

* * * *

"The Cruithne acquired the western region,
After they had come from the plains of Erin:
Seventy noble kings of them
Acquired the Cruithen plains."[1]

Of the history of the neighbouring island during the first centuries of the Christian era our knowledge is necessarily extremely imperfect and uncertain; nor have the over-zealous exertions of Irish antiquaries to clear up this period of their national annals greatly added to our information. Without, however, entering upon the controverted ground of primitive Irish history, it is sufficient for our present purpose to know that at the period of the introduction of Christianity into Ireland it was occupied by the Hiberni, an ancient if not aboriginal Celtic race, by the Cruithne, as the inhabitants of Ulster are called by the native annalists, and also by the Scoti, a race who

[1] *A Eolcha Albain Uile*, translated from the Codex Stowensis, No. XLI. Collect. de Reb. Albanicis, Iona Club, p. 71. Albanus, from the Celtic god, *Alw*—Gaelic, *Aluin*, bright, beautiful; *Alw-ion*, Αλουίων, Albion, *i.e.*, the island of Alw; Britus, *Pryd*, *Prydain*, *i.e.*, Pryd, god of Britain. Welsh Archæologia, vol. i. p. 72. Meyer on the Celtic Dialects. Report, 1847, Brit. Assoc. Advancement of Science, p. 301. *Bryt* or *Pryd*, the god of the Britons, the *Prydyn ap Ædd Mawr* of the Welsh Triads.

had then apparently established themselves in Ireland, and secured a complete supremacy over the elder native population, at no very distant date. Whencesoever this latter race was derived, we have evidence that they were considerably advanced in civilisation, though their superiority appears to have been less in arts than in arms, the traces of early artistic skill being generally ascribed on satisfactory grounds to the older races who acknowledged their supremacy. So effectual was their superiority in arms, however, in effacing every trace of the independence and nationality of the more ancient tribes, that towards the close of the third century at the latest, the name of Scotia appears to have been generally applied to Ireland, and for nearly seven centuries continued to indicate the Hibernia of Latin writers.

Christianity had already gained some partial footing in Ireland prior to the apostolic mission of St. Patrick, who was consecrated for that purpose by Pope Celestine, A.D. 433. Both the parentage and country of the Irish apostle have been made the subject of recent controversy, but, according to the most commonly accepted history, the little village of Kilpatrick, on the north bank of the Clyde, between Glasgow and Dumbarton, claims the honour of having given birth to the patron saint of Ireland; in return for which the Scottish apostle, St. Columba, is acknowledged as of Irish origin. Though Ireland was not unknown to the Romans no attempt appears to have been made to subject it to their grasping sway, and it was accordingly left to reap by indirect means the advantages of southern civilisation. This the introduction of the new religion most effectually promoted. Greek and Roman literature received the attention of the clergy in a way that produced far more direct and beneficial results than any which flowed from the intrusion of Roman civilisation and supremacy into the neighbouring island. A native literature was developed and fostered, native arts sprung up, and architecture assumed a peculiar national character. From the middle of the fifth till nearly the close of the eighth century, Ireland was among the most civilized and prosperous of the nations of Europe, and wanted only a native Alfred or a Canmore to give the same unity to its independent tribes which St. Patrick had conferred on its ecclesiastical state.

It was during this prosperous era, in the very beginning of the sixth century,[1] that a small colony of these Irish Scoti effected a

[1] Skene's Highlanders of Scotland, vol. i. pp. 19, 23.

settlement in the district of Scotland now known as the county of Argyle, and conferred on it the name of Dalriada, according to spurious monkish traditions, in honour of their leader, Cairbre Riada, a celebrated Scottic warrior whose epoch is assigned by older Irish annalists to the third century. This, however, was certainly not the first interchange of races between Scotland and Ireland, nor did it exercise any immediate influence on Scottish history. The earliest authentic records succeeding the era of Roman invasion exhibit Scotland divided into the kingdoms of the Cruithne, or Northern Picts, and the Piccardach, or Southern Picts. The Irish Cruithneans were doubtless a Celtic colony originally from Scotland. Early writers agree in recognising both by the same name of Picts, though few subjects have excited more fruitless controversy than the attempts to assign historic consistency to the half-fabulous race of Scottish Picti, or even to agree on the derivation or meaning of their name. The *nec falso nomine Picti* of Claudian was long assumed as decisive of their being mere naked savages, who decorated their bodies with paint. But this error is now generally abandoned. A more consistent derivation may be sought in the Welsh *peith, to scream, to fight,* whence *pic-t-a, fighting man.* In accordance with such a derivation it appears to have been common to more than one native tribe or kingdom, and to have been rarely or never used unaccompanied by some distinctive epithet, such as the *Gwyddyl Ffichti,* or Gaelic Picts of the Welsh Triads.

Into the long disputed question of the origin of the Pictish race, it is happily no longer needful to enter at large. Much learning and acrimony have been expended on it, not altogether without reason; for its proper understanding involves the consistent resolution of that period, of no slight importance in Scottish history, intervening between the year 296 of our present era, when the first mention of the Scottish Picti occurs,[1] and the intrusion of the Saxon race in the eleventh century into the kingdom of the Southern Picts. To the critical researches of one or two recent writers, and especially to the consistent narrative of Skene in his able work on the Highlanders of Scotland, we owe the rescue of this portion of Scottish history from the confusion and mystery to which monkish legends and modern controversy had consigned it. During this important era which intervenes between the final retreat of the Romans and

[1] Eumenius, Ritson's Caledonians, vol. i. p. 71.

the accession of Malcolm Canmore, we find North Britain divided into the three kingdoms of the Northern and Southern Picts and the Dalriads. The Irish derivation of the latter being undoubted, further research into their origin has been left to Hibernian antiquaries, while our native writers long sought in vain to discover any clue either to the intrusion or extrusion of the Pictish race, which if distinct from the old Celtic population, must have appeared and disappeared like the winter's snow. By some they have been supposed to have been utterly eradicated by successive invaders, or to have gradually disappeared as a distinct race by marriage and intermingling with their supplanters. Others have maintained that the Northern and Southern Picts were two distinct races, of which the latter alone were exterminated or driven from the soil by the successive invasions of the Lowlands, while the former maintained their ground, which is still possessed by their descendants the Scottish Highlanders. The weight of evidence, however, and the manifest coincidence between the ancient topographical nomenclature throughout the whole of Scotland, leave no room to doubt that both the Northern and Southern Picts, who have long formed a mythic and half-fabulous race in the popular traditions of Scotland, were none other than the original Celtæ, who so resolutely withstood the Roman invaders. Ptolemy gives the names of thirteen Caledonian tribes; in some editions of the Old Geographer the number is extended to seventeen; and to these the questionable authority of Richard of Cirencester adds at least four more. In all probability the greater number of these existed as independent and frequently rival tribes, up to the period of Roman invasion, and were for the first time united under one leader or chief when Galgacus led them against the legions of Agricola. The immense host, however, which he brought into the field, shews that Scotland was then no longer a savage and thinly-peopled country, while their war-chariots, their shields, huge iron swords, and other effective accoutrements, have already been referred to in evidence of the progress which they had then made in the useful arts. This union against a common enemy, maintained as we have good reason for believing it was, throughout the whole period of the Roman occupation of Scotland, was perhaps the most important of all the fruits which Scotland reaped from the intrusion of the civilized Romans; and to it we may with much probability ascribe the permanent coalition of the numerous independent tribes, and the consequent estab-

lishment of the two Pictish kingdoms, the limits of which were to a great extent determined by the natural features of the country. Both spoke dialects of the same Celtic language, to which the philologist still turns for explanation of the more ancient names of Lowland as well as Highland localities, and which still exists as a living tongue among the Scottish Gael. In the Welsh Triads, which are believed to be fully as old as the sixth century, the Picts are uniformly designated, without distinction, as the *Gwyddyl Ffichti*, that is the Gaelic or Celtic Picts; and Bede, in enumerating the different languages in which the gospel was taught in Britain, speaks of the *lingua Pictorum* as one tongue, though it is apparent elsewhere that he was familiar with the distinction between Northern and Southern Picts. Even Ritson, while fiercely opposing the idea of any community of origin between the Caledonian Britons and the Picts, admits that the language of the latter was a Celtic idiom.[1] They were in fact the descendants of the only primitive Scottish race of which we possess any authentic historical evidence: the Albiones of Festus Avienus; the race of Albanus of the "Albanic Duan;" the Albanich of Welsh and native writers; and the most numerous and powerful representatives of a people which we have reason to believe continued exclusively to occupy the British Islands from a period the commencement of which we must seek in those dim unchronicled centuries we have already attempted to explore, down to the fifth or perhaps the fourth century B.C. Then began what we should call the Teutonic Invasion, and the long quiescent Celtæ once more renewed their old nomadic life. Yet the lapse of so many centuries has not sufficed to efface the ancient characteristics by which we still recognise as one race the Cornish, Welsh, Gaelic, and Irish Celtæ.

Of six modern Celtic dialects still recognised in Europe, four belong to the British Isles. A fifth, the Cornish, now extinct, also pertained to the same insular home of the Κελται, while the only remaining one, the Armorican, or dialect of Brittany, belongs to a country intimately associated in the history of its early colonization with Britain. The table of the modern Celtic dialects of Europe, as modified by Dr. Charles Meyer, and adopted by Dr. Latham,[2] from

[1] Ritson's Caledonians, vol. i. p. 120.

[2] Dr. Latham in treating of the Κελται, sets down under the head of *Phenomena of the System:* "the Druids; the bards; the monumental remains of the character of Stonehenge—*Máenhir*, long stones;" and under the head of their *Antiquities:* "Coins, images, tumuli, and their contents."—*Nat. Hist. of Man*, p. 530. But this is a sweeping system of generalization, which takes for granted

that given by Dr. Prichard in his "Eastern Origin of the Celtic Nations," is as follows—divided primarily into two great dialects, each composed of three separate idioms:—

I. The Gallic or British.
1. Cymric or Welsh.
2. Cornish.
3. Armorican, or dialect of Brittany.

II. The Gaelic or Erse.
1. Fenic or Irish.
2. Gaelic or Highland Scottish.
3. Manx.

But a new race of strangers acquired a footing in Scotland, who were destined to bear no unimportant part in its history. The colony of Irish Scoti, or Dalriadic Scots, having effected a settlement in the district of Argyle, continued to occupy this limited locality for upwards of three hundred years, without seeking to extend their possessions beyond the natural boundaries which inclose the Western Highlands. To this period we may with little hesitation assign many of the traces of ancient population, civilized arts, and extensive cultivation, which have been described in a former chapter.[1] A close intercourse appears to have been always maintained between the Scottish Dalriads and their Irish progenitors, and the history of the Dalriadic kingdom is still chiefly derivable from Irish annalists. From these we are led to conclude that the number and influence of the Dalriadic Scots had gradually increased, while the attention of the Northern and Southern Picts was chiefly engrossed by their own rival jealousies; but their position was frequently precarious, and for nearly three centuries they owed their safety fully as much to the natural isolation of their little kingdom, as to the dissensions of the Picts and the fidelity with which the Irish Scoti adhered to this colonial offshoot from the parent stock. The cooperation and alliance of the Dalriads at length became objects of consideration to these neighbouring rivals, and we learn of a union between the Scots and the Northern Picts, entered upon in the year 731, for the purpose of supplanting Angus MacFergus, a Southern Pict, who then occupied the throne.

various points still open to question, if not already disproved. The derivation suggested, (*ante*, p. 68,) for the term Cromlech, if the correct one, seems to indicate that the true origin and character of these sepulchral memorials were as little known to the ancient Celtæ as to the "Druidical" antiquaries of last century.

[1] *Ante*, pp. 122-124.

At first the Cruithne and their allies were completely worsted, and for upwards of eighty years the larger portion of the kingdom of Dalriada appears to have been subjected to the rule of the Southern Picts. There is abundant evidence, however, that the Irish Scoti continued to maintain a close intercourse with their Dalriadic descendants, and made common cause with them against the Piccardach. The Irish annals occasionally afford the only evidence we now possess of the wars then waged between Scots and Picts, by recording the death of their native kings and chiefs, slain in Albany when fighting with their Dalriadic kindred. But for this powerful aid, it is difficult to conceive how the Dalriads could have held their ground within the small territory which they occupied, in opposition to a powerful kingdom united under one sovereign, even with all the skilful tact with which they availed themselves of the jealousies and rivalry existing between the northern and southern tribes. The struggle between the Dalriads and Picts assumed latterly in some degree the character of a war of succession. There is reason to believe, from several of the names of the Dalriadic kings, that they had not failed to strengthen their alliances with the Northern Picts by intermarriage, so that it is not improbable, owing to the peculiar Celtic ideas of succession by the female line, that the Dalriads may have acquired a claim to the Pictish throne. There appears, however, not only to have existed lines of hereditary sovereigns, succeeding according to the peculiar Pictish laws of succession to the supreme rule, but also a hereditary *nobile genus*, or patrician class, holding as tenaciously by the purity of their blood and lineage, as under the most stringent rule of the lyon kings-at-arms of a later age.[1] Much obscurity still rests on this period of our national history. Partially and at intervals we discover glimpses of the struggle then going on, amid which, however, increasing evidences suffice to shew that fortune favoured the Dalriadic Scots, until in the year 843 the whole of Scotland is found united under the sceptre of Kenneth MacAlpin, originally sovereign of the little kingdom of Dalriada.

This is that remarkable epoch in our national history known by the name of the Scottish Conquest. It has naturally formed the subject of much investigation and of still more debate. Our earlier historians, assuming the results to have corresponded with the term Conquest, attribute to Kenneth the total extermination of the Piccardach or

[1] Adomnan. b. 2, c. 33; Skene's Highlanders, vol. i. p. 40.

Southern Picts; the consequence of which has been, that later and more accurate writers, seeking in vain for any evidence of so complete a revolution, have been inclined to pronounce the whole a fable. But it still remains for us to inquire if no other elements of friendly alliance and permanent union existed between the Picts and Scots than those which sprung from cooperation against a common foe. A tradition of a Spanish origin appears to have been ascribed to the Irish Scoti from the earliest period. It is interwoven into all the fables and monkish legends of our earlier chroniclers, and has already been alluded to in reference to the Lia Fail. It is now perhaps vain to attempt to analyze this obscure and doubtful tradition, though we are not without evidence of its probability.[1] The period of their arrival in Ireland is necessarily very partially ascertained, though our information is perhaps sufficiently authentic and minute if we assume, from the notice of Avienus, already referred to, that they were unknown in Ireland in the fourth century before Christ, while we have good evidence of their presence there at the period of Julius Cæsar's British invasion. During this interval history furnishes very satisfactory means of accounting for such a migration. In the year B.C. 218, the second and fiercest struggle between the rival republics of Carthage and Rome was commenced by Hannibal taking Saguntum, a town on the eastern coast of Spain. The Peninsula thereafter became the theatre of a war afterwards carried by Hannibal into Italy, which was not concluded till B.C. 202, when Spain was added to the growing empire of the Italian Republic. But the natives of Spain did not willingly bow to the yoke. One of the bloodiest of all the Roman wars commenced in Spain B.C. 153, and did not finally terminate for twenty years, during which cities were razed to the ground, multitudes massacred and made slaves, and the triumphant arms of Rome borne to the Atlantic shores. Here therefore is an epoch in the history of the Spanish peninsula which seems completely to coincide with the ancient traditions of the Scoti, and the knowledge we possess of the period of their arrival in Ireland.

[1] "As far as regards the Irish tradition of the Fena having arrived from Spain and Africa, to deny it all foundation in history would be inconsistent with what we ourselves have said of the route of the western Celts. I do not hesitate to detect in this tradition a reference either to that migration or to one anterior, which seems to have led likewise by the African coast to Spain, as well as to this country, a nation of Scytho-Celtic (*Fiano-Celtic*) race, including the ancient Iberi and the still extant Basque nation."—Dr. C. Meyer, Report of the British Association for Advancement of Science, 1847. It is scarcely necessary to add, however, that the Celtic character of the Basque, as assumed here, is now generally disallowed.

Such coincidences are not of course to be accepted as absolute proof; but in the absence of more direct evidence they are well worthy of attention, as guiding us to some knowledge of that race which had acquired a footing in Ireland, and partially displaced the aboriginal Hiberni shortly before the Roman invasion of England. But we have still the evidence of philology, the prevailing topographical nomenclature of Ireland, and the dialects of its earliest native literature, all adding confirmation to the conclusion that the Scoti were only another branch of the great Celtic family, which, after enjoying the advantages of commercial intercourse with Phœnicia and Carthage, and sharing in the civilisation of the distinguished nations then bordering on the Mediterranean, had at length been driven forth from their settlements on the western shores of Spain by the encroachments of the Roman Republic. The brief and very partial presence of a Scandinavian race in Scotland is still traceable in its dialects and topographical nomenclature; but no such indications within the limits of the ancient Dalriada, or in the Erse as contrasted with the British dialects of the Celtic language, betray indications of the Irish Scoti having interfused any elements of a foreign tongue into the ancient language of the Scottish Gael. Assuming, therefore, their Celtic origin we can readily understand how a race speaking a cognate dialect, and seeking the shores of Ireland, not as invaders, but as refugees, might rapidly acquire the supremacy over the older Celtic races inferior to them in the arts of war. Such a superior Celtic race were no less fitted to become the colonists and chiefs of Caledonia; and to this consanguinity between the Irish Scoti and the Scottish Picts, which rests more on philological evidence than on any theory of the direct origin of the former, we must look for one of the most important elements in that remarkable revolution of the ninth century known as the Scottish Conquest. The subdivisions of the great Celtic family are of much more importance in relation to the early history of the British islands, and especially of Scotland, than the later Teutonic migrations. There are, first, two great subdivisions, arising apparently from the different routes by which the Celtæ migrated from Asia to the north-west of Europe; and secondly, there are the minor subdivisions,—of greater importance in their bearing on the present inquiry,—resulting from successive arrivals in this country of offshoots from both the great streams of migration, modified by previous sojourn in different countries of Europe, and probably also by some intermingling with foreign

races. Thus, the Cruithne and Piccardach, or Northern and Southern Picts of Scotland, are frequently distinguished by the Welsh chroniclers as the *Gwyddyl duon* and the *Gwyddyl gwyn*, or *black* and *fair Gaels*. Perhaps the term *Du-Caledones* (*Di-Caledones*), by which the Romans distinguished the Northern from the *Vecturiones* or Southern Picts, is only a combination of the Celtic *du* or *dubh*, black, with the generic name adopted by them. The Scoti appear also to have been *of the fair race*, which may, perhaps, be assumed as the indication of a purer Caucasian origin than the Cruithne or *Gwyddyl duon* of the north. They are termed in the Welsh Triads the *Gwyddyl coch* or *Red Gaels;* while the name of *Scot*, which has adhered to them and to the later country of their adoption, is none other than that of Nomade, *Scuta*, wanderer, first applied to the refugees—as we conceive from Spain—who in the second century B.C. sought a new home amid the Irish Celtæ.[1] It is to be noted, however, in reference to the former appel-

[1] "The Celtic *Scutâ* denotes *a vagabond, a restless wanderer, one perpetually roving about.* This word is the original of the Greek Σκυθα, Scytha, a Scythian; applied to the Scythians with a view to the restless roving disposition of the people. Analogous to this idea, the Persians called the same people Σακαι, Herod. l. 7, cap. 74. Ὁδὶ Πέρσαι πάντας τοὺς Σκύθας καλέουσι Σακάς. *Sacæ.* The Persian *Sack* is plainly a cognate of the Hebrew *Shakak*, discurrere, discursitare, &c. In confirmation of this etymon, it may be observed that the Scots borderers used to call themselves *Scuytes* and *Skytes*, as we learn from Camden. The Saxon-Scots readily adopted this name, being ignorant of its original import; but the Highlanders have always deemed it a term of reproach, and consequently retain their original denomination, *Albanich.*"—Abridged from notes to "*The Gaberlunzie,*" by Callander of Craigforth, 1782. *Vide* also "Illustrations of Northern Antiquities," Glossary, *v. Scouts*, p. 520; and "Jamieson's Scottish Dictionary," *v. Scouth.*

In connexion with this, it is of importance to note the observations of Major Rawlinson in reference to the indications of the aboriginal races of Asia afforded by the Cuneatic inscriptions. He conceives that the Sacæ or Cymri frequently mentioned on the inscriptions at Khorsabad, and who appear to have been generally introduced into the Assyrian empire about the thirteenth century before Christ, were probably of Scythian origin. He, however, thinks it impossible to identify this tribe immediately with the Gaelic Cymri. It appears more probable that, under the name of Cymri, the Assyrians included all the Nomade tribes with whom they were acquainted, without respect to ethnological family; but he suggests that the Celtæ subsequently applied this generic name specifically to themselves, as among the Moguls of the present day a particular tribe have taken the name of "Eluth" or "Ilyat," which properly denotes a mere Nomadic population. The other tribes with which the Assyrians were chiefly brought in contact, were the Shetta or Khyta in Syria, and the Ludi in Lower Babylonia. The former tribe are well known from the inscriptions of Egypt, and the latter were probably the same people who are mentioned in Ezekiel under the name of "Lud," in connexion with "Phut" and "Elam." These tribes of Khita and Luda were both undoubtedly of Semitic origin.

We may confidently anticipate that these researches into the races and languages of the central region of Asia, from whence we believe the human family to have been gradually diffused over remoter countries, until the first colonists reached our own western island, will yet furnish much of the pre-

lations, that both the Scots and Irish were wont to distinguish the Scandinavian invaders by the name of *Dubh-Ghaill*, the black strangers,—a term derived not from their complexion but their costume.

The presence of a Pictish race—the Cruithne—in Ireland, contemporary with the Scottish Piccardach and Cruithne, and the very great correspondence between many of the gold and bronze relics, as well as the older architectural and monumental antiquities of Scotland and Ireland, all point to a very close intercourse maintained between the two countries at an early period, while the remarkable historical poem, the Albanic Duan, already quoted, assigns to the Cruithne of Scotland an Irish origin. Under such circumstances the occupation of Dalriada by a Scotic colony speaking a dialect of the same language as the Caledonian Picts would be too unimportant a change to excite any notice beyond the limits of the Western Highlands. The native tribes whose borders were encroached upon would settle their disputes according to the summary diplomacy of primitive courts; and that done, intercourse, alliances, and intermarriages would follow as naturally between Scots and Picts as between Piccardach and Cruithne. So, in like manner, when the Scots in alliance with the Cruithne or Northern Picts conquered the Piccardach or Southern Picts, it was merely transferring the supremacy to a more powerful branch of the same great Celtic family. There existed few of the causes for lasting or deadly feud which occur in the struggle for power between rival races, such as the Moors and Goths of Spain, or the English and Irish. The struggle in England between the Normans and Saxons owed its chief elements of bitterness to other causes, as is proved by the readiness with which the two races intermingled when they met on common ground and on an equal footing in the Scottish Lowlands, under Malcolm Canmore. Aided by the very summary processes adopted in rude periods for getting quit of the elements of a disputed regal succession, the lapse of a single generation would suffice to obliterate the animosities between Scot and Pict, and to establish the former in undisputed possession of such supremacy as the Normans had to compel and to maintain for several generations in England, at the point of the sword. Perhaps it formed another element of interfusion among the various Celtic races that the supremacy of the Scoti was solely as

cise information we require relative to the earliest Asiatic migrations of the Celtæ, and the degree of civilisation possessed by them when they began the north-western movement that finally led them to the remotest countries of Europe, bordering on the Atlantic.

warriors. The old native race are always referred to by the Irish bards as superior to them in the knowledge of the arts; a fact perhaps sufficiently accounted for on the presumption of their arrival in Ireland as refugees, after a protracted strife extending over more than one generation, during which the refined arts and luxuries of civilisation would disappear in the struggle for existence. This also may in some degree account for the fact that the Scoti allied themselves with the inferior and most dissimilar race in Scotland, compelled thereto obviously by the superiority of the Piccardach or Fair Picts. But the superior race finally triumphed. The Scoti, indeed, with the aid of the Cruithne, gained the ascendency; but on the extinction of the Scotic line of princes descended from Kenneth MacAlpin, or on the transference of the crown to a collateral branch, according to ancient Pictish law, it seems to have returned to the fair race of the Piccardach. The ultimate ground of dispute between the two, which proved the chief stumbling-block, and prevented a complete union of the southern and northern kingdoms during the reign of the Scottish dynasty, was this Celtic idea of succession through brothers, in opposition to the hereditary succession aimed at by the Dalriadic race, and which was not so effectually forced on the Northern Picts even by the Saxon Conquest as to prevent its revival by Donald Bain, on the death of Malcolm Canmore in 1093. The concluding stanzas of the *Albanic Duan*, written in the early part of Malcolm's reign, are peculiarly characteristic of the revived claims of the *Gwyddyl duon*,—

"Malcolm is now the king,
Son of Duncan of the yellow countenance,
His duration no one knoweth
But the knowing one who alone is knowing.

Two kings and fifty,—listen,—
To the son of Duncan of the ruddy countenance,
Of the race of Erc, high, clear in gold,
Possessed Alban,—ye learned."

But though a variety of evidence seems to refer to the Scoti as inferior in arts to the native Irish, it is still probable that Ireland owes to them the introduction from the southern seats of European civilisation of some of the useful and ornamental arts, the traces of which are so abundant throughout the island. It is, however, chiefly to their undoubted superiority in arms over the kindred races that previously were in possession of the ancient kingdoms both of

Hibernia and of Albany, that we must ascribe the singular and almost unparalleled occurrence of the conquerors transferring their own name to the whole race and country subject to their rule.

Such is a hasty glance at the most important events pertaining to the civil history of Scotland during the first centuries of the Christian era, with an attempt to account for some of the changes that have heretofore seemed most difficult to reconcile with ascertained facts. But other and no less remarkable changes were, meanwhile, being wrought on the native tribes of Caledonia. The legionaries of Rome had in vain attempted to penetrate into their fastnesses; but other Roman missionaries of civilisation followed with more abundant success. Towards the latter end of the fourth century, ere yet the little kingdom of Dalriada had a being, a youth, the son of a British Prince of Cumberland, visited Rome during the Pontificate of Damasus, elected Bishop of Rome, A.D. 366. Young Nynias, or Ninian, remained there till the succession of Siricius to the Popedom, A.D. 384, who, according to Bede, finding the young Briton trained in the faith and mysteries of the truth, ordained him, and sent him as a Christian missionary to preach the faith to the heathen tribes of North Britain. This is the celebrated British Bishop St. Ninian, or St. Ringan, as he is more frequently styled in Scotland, where numerous churches, chapels, holy wells, as also caves and other noted localities, still bear his name. Arriving in Britain towards the close of the fourth century, he tarried not among his native mountains of Cumberland, but crossing the Solway, established the chief seat of his mission at Whithern, in Wigtonshire, a prominent headland of the old province of Galloway, where he erected the celebrated *Candida Casa*, according to Bede, "a church of stone, built in a manner unusual among the Britons."[1] The fact is of great value, as disproving the assumption of both Scottish and Irish antiquaries, prior to Dr. Petrie, that the earliest British churches were constructed of wattles. The remains of Roman buildings in Scotland suffice to shew that the Britons of the fourth century had not then to learn, for the first time, the art of masonry, though the facilities offered by a thickly wooded country frequently led the first Christian missionaries to employ its oak and plaited reeds in the construction of their chapels and cells. We are told by Bede that the first church of Lindisfarne was built by St. Finan, *more Scotorum, non de lapide, sed de robore secto et arundine.*

[1] Beda, l. 3, c. 4. Ritson, vol. ii. p. 308.

The brethren of Iona, too, as Adomnan incidentally mentions, were challenged by the proprietor, from whose lands they had gathered stakes and wands for the repair of their dwellings. Yet notable as the cathedral church of Whithern doubtless was, we can have little hesitation in picturing it to our own minds as a sufficiently humble and primitive structure, though distinguished among contemporary edifices, and dear to us in no ordinary degree, as the first British temple consecrated to the rites of the true faith. The Candida Casa, or white-walled cathedral of Whithern, though dedicated originally to St. Martin,[1] became the shrine of the Scottish apostle St. Ninian, and the resort of many a royal and noble pilgrimage, down even to the Reformation; but it would be vain now to look for any relics of this most interesting primitive structure on the bold headland of Galloway, though the fragments of a later ruined chancel still mark the site of St. Ringan's famous shrine.

The death of the primitive Scottish Bishop St. Ninian took place A.D. 432. According to the accepted biography of St. Patrick it was in the following year that Pope Celestine consecrated him a Bishop, and sent him on his mission to Ireland. But the labours of the Scottish missionary had not been in vain. "The brethren of St. Ninian at Whithern" became the centre of an important movement, influencing a large and rapidly increasing sphere, and from their labours there is reason to believe that both England and Ireland received the first impressions towards that great movement which ultimately included the British Isles within the ecclesiastical unity of papal Christendom. It furnishes no inconclusive evidence of the progress of the new faith in the British Isles, that St. Palladius was sent from Rome to the Christian Scots, towards the middle of the fifth century, for the purpose of uprooting the Pelagian heresy. His chief mission was to Ireland, where the Scots were then settled, but he also cared for the converts of the neighbouring isle, then connected with Ireland both by frequent intercourse and by affinity of races. He personally visited the Christian Picts of North Britain, and despatched his disciple St. Servanus, or St. Serf, as he is more usually styled, to the Northern Islands, for the purpose of preaching the true faith to the natives of Orkney and Shetland. That he also was successful many local names and traditions, and even some ecclesiological relics, hereafter referred to, suffice to prove, and thus we arrive at the impor-

[1] Vita Niniani, Ritson, vol. ii. p. 144.

tant fact, that Christianity had already established a firm footing, both in the Scottish mainland and the isles, long before we have any evidence of the presence of the Scandinavians, even as roving marauders, on our coasts. The value of this will be at once apparent, as shewing the necessity which authentic history imposes upon us of referring to a period long anterior to the intrusion of the earliest Scandinavian colonists into Scotland, the erection of the monolithic structures, memorial cairns, and other primitive monuments, which fanciful theorists have assigned, without evidence, to such foreign origin. It is uncertain how long St. Palladius was in Scotland, but his last days were spent there, and he died among his Cruithnean converts at Fordun, in *Mag-girgin*, or the Mearns. We find good evidence that the influence of his preaching was not evanescent. Before the end of the fifth century churches had been founded, and brotherhoods of priests established, both in the islands and on the mainland; and Bede relates that, in the beginning of the eighth century, while yet the Dalriadic Scots remained within the narrow limits of their first possessions in the Western Highlands, the Pictish king sent to his own monastery of Jarrow, craving that builders might be commissioned to construct for him a church of stone after the Roman manner. From this we are led to infer that the "mos Scotorum" referred to by Bede, of building both houses and churches of timber and wattles, was also the "mos Pictorum" of the same period; but Dr. Petrie has already conclusively established the fact that this custom prevailed only to a very limited extent in Ireland, and contemporarily with the erection of religious structures of so substantial a nature that characteristic examples of them still remain in sufficient preservation to shew perfectly what they had been in their original state. It is indeed from Adomnan's Life of St. Columba that Dr. Petrie produces the earliest historical authority which satisfactorily proves the erection of a round tower in the sixth century.[1] We search in vain for such primitive ecclesiastical structures in Scotland, or even for the stone churches which Boniface and other Italian builders, sent at King Nectan's desire, are said to have built at Invergowrie, Tealing, and Restennet in Angus, at Rosemarky in Ross, as well as in other parts of the kingdom of the Northern Picts. Yet it will be hereafter seen that we are not without some evidence of the character of primitive Scottish churches "built after the Roman manner."

[1] Ecclesiastical Architecture of Ireland, p. 387.

Besides the primitive Christian missionaries referred to as bringing tidings of the new faith to Scotland, St. Rule, St. Adrian, St. Woloc, St. Kieran, and St. Kentigern, must each be noted as sharing in the good work. But the religious establishment which St. Columba founded at Iona, in the middle of the sixth century, is justly regarded as the true centre of all the most sacred and heart-stirring associations connected with the establishment of Christianity in Scotland. "That illustrious island, which was once the luminary of the Caledonian regions," still awakens feelings in the mind of every thoughtful visitor, such as no other Scottish locality can give birth to, unless a Scotsman may be pardoned if he associate with it, not "the plain of Marathon," but the field of Bannockburn. We look in vain for any natural features in this remarkable island to account for its selection as the centre of primitive Christian missions in Britain. It is only about two and a half miles in length, and one in breadth. The waves of the Atlantic dash, with almost unceasing roar, against the rugged granite cliffs which guard its southern and western coasts; and but for the memory of its sacred historical associations, and of its ancient magnificence which has utterly passed away, there is nothing about the little island, placed far amid the melancholy main, that could now tempt the most curious traveller to approach its shores. St. Kieran, the favourite Celtic saint, was the precursor of St. Columba, and even it is said his instructor in the faith. He came from Ireland in 503, with the sons of Erc, thus celebrated in the Albanic Duan as converts of St. Patrick,—

> "The sons of Erc, son of Eathach the prosperous,
> The three who obtained the blessing of Saint Patrick."

The cave of St. Kieran is still shewn in Kintyre, where the first Christian teacher of the Western Highlands is believed to have made his abode. If the dates of this remote era may be relied on, it was not till upwards of half a century after the arrival of St. Kieran, that the great Apostle of Scotland landed on its shores. The record of Bede is equally simple and precise,—"Anno DLXV. Columba presbyter de Scotia venit Brittaniam ad docendos Pictos, et in insula Hii monasterium fecit." The isolation of that little island might perhaps be thought to have proved an attraction to Colum M'Felim M'Fergus, when he abandoned Ireland in his rude *currach*, or boat of hides, and sought an asylum among the Scottish Picts. But the old Celtic traditions seem rather to indicate, that in the true missionary spirit he

bearded the ancient faith in its stronghold, and reared the primitive Christian fane of Iona, where of old the Pagan circle had stood. The name of Hii, or I, by which the sacred isle is most generally known, signifies emphatically THE ISLAND. It is also familiar to us as Ii-Cholum Chille, or the Island of Columba's Cell; but the Highlanders, to the present day, frequently apply to it the name of *Innis nan Druidheanach*, or the Island of the Druids, or magicians. The first structure reared by St. Columba and his followers on Iona, was doubtless as humble as the little *currach* by which they had reached its shores. One curious passage, already referred to, speaks of the Abbot as sending forth his monks to gather bundles of twigs with which to build their Hospice. The little chapel of St. Oran, the first follower of St. Columba who found a grave in the sacred soil, still exists, and has been frequently described as a work of the sixth century, but the experienced ecclesiologist will feel little hesitation in dating it full six centuries later. It is not indeed at such spots as Whithern or Iona that we are to look for the existence of primitive structures. The veneration which made these the favourite resorts of pilgrims for many centuries, was little likely to permit the first homely fane to continue, at a period when the re-edifying of churches and monasteries, on a larger and more magnificent scale, was one of the readiest exponents of the piety or contrition which the Church inculcated on its disciples. If any of the primitive Scottish churches still exist, they must be looked for in localities less favoured by the fidelity of medieval piety or superstition.

Christianity we thus perceive was established in Scotland at a very early period, altogether apart from any contemporary intercourse which England may have maintained more directly with the converts of the neighbouring continent. Several important centres were fixed at various points, including the extreme south-west of Scotland, the remote northern, and the western Isles. From these the faith rapidly radiated to the whole surrounding regions, and was even carried by the youthful zeal of the new converts to distant shores. The Icelandic Sagas furnish abundant proof of the conversion of the natives of North Britain and Ireland long prior to Scandinavia, and of the direct influence which they exercised in the Christianizing of the north. When Norsemen first visited Iceland in the latter half of the ninth century, it was uninhabited, but they discovered traces of the former presence of Irish monks, and found their books, crosiers,

and bells. This account, derived from the Sagas, receives independent confirmation from the narrative of Dicuil, an Irish monk of the ninth century, who states that monks from Ireland had resided in Iceland for six months, and also visited the Færo Islands, and found them uninhabited.[1] There also existed in ancient times a church in Iceland dedicated to St. Columba, and a native Icelander is described as having been educated by an abbot named Patrick, in the Western Isles of Scotland or Ireland. We likewise find in the names of several of the northern Scottish Islands, and in the traces of the dedications of their earliest churches, ample confirmation of their inhabitants having been Christianized prior to any Scandinavian settlement. The islands of North and South Ronaldshay are now distinguished by their relative positions, but their ancient names are *Rinansey* and *Rögnvalsey*. Professor P. A. Munch, of Christiania, adds in a letter referring to this subject,—"I have no doubt that the name of the island, before the Scandinavian settlement, was St. Ninian's Island, Ringan's Island, Ronan's Island, which involves the Christianity of the ancient Celtic population before the Norwegian settlement." It is not, however, with Scandinavian antiquaries that we have to contend in clearing up these points of national history, but with British writers, who vainly seek the sources of native arts and civilisation in those of nations younger than our own. Mr. Worsaae acknowledges that Ireland was Christianized several centuries before Scandinavia, and largely contributed towards the conversion of the latter to the new faith. Interesting traces still remain in the names of many Scottish localities of the primitive Christian colonies, and of the collegiate establishments founded, like that of Iona, in many of the northern and western Isles, several of which are mentioned by Adomnan in his Life of St. Columba. In the curious diploma addressed to Eric, king of Norway, respecting the genealogy of William Saint Clair, Earl of Orkney, drawn up by Thomas Tulloch, bishop of Orkney, about 1443,—wherein, for the sake of brevity, he lets pass many "notable operationis and gestis, and referrs ws till auld cronikis and genealogiis, autentik and approbat," the following notice occurs: "Sua we find that in the tyme of Harald Comate, first king of Norwege, this land, or contre insulare of Orchadie, was inhabitat and mainerit be twa nations callit *Peti* and *Pape*, quhilk

[1] Dicuil's work was discovered at Paris, and published there in 1807 and 1814.—Antiquities of Ireland and Denmark. Worsaae, p. 17.

twa nations, indeid, war all wterlie and clenlie destroyit be Norwegens, of the clan or tribe of the maist stowt Prince Rognald."[1] These were undoubtedly the native Celtic population, or Picts—of the total extermination of whom a document of the fifteenth century cannot be regarded as very conclusive evidence—and the Papæ or ecclesiastical fraternities sent forth from Iona. In the Life of St. Columba it is stated, that the Saint chancing to meet a prince of the Orkneys at the palace of King Brude, commended to his care some monks who had lately sailed to the Northern Seas, and the missionaries afterwards owed their life to his intercession.[2] The Landnáma states, that wherever the Norwegian settlers found monks, or remains of their establishments, they called the places by some name beginning with *Pap*, from *pfaff*, *Papa*, *πάππας*, a priest,—as *Papey*, the Priest's Island; *Papuli*, the Priest's district. In Orkney there are two *Papeys;* the larger Papa Westray, the smaller Papa Stronsay. In the mainland also there is Paplay, (*Papuli*); another Paplay in South Ronaldshay; in Shetland two *Papeys*, Papa Stour and Papa Little; and a Papill (*Papilia*) in Unst. In the Hebrides also there are two *Pabbys*, (*Papey*,) and a *Pappadill* in Rum. Adomnan mentions, besides his own monastery, those of Achaluing, Himba, Elanna-oma, and Kilduin; the three last supposed to be Oransay, Colonsay, and Loch Awe. Eig, Islay, Urquhart, Inchcolm in the Frith of Forth, Govan on the Clyde, and many other religious sites, are also ascribed, on more or less trustworthy authority, to the missionary zeal of St. Columba, and his immediate followers; while a still earlier origin is assigned, not without some evidence, to various of the ancient Culdee Houses reformed by David I., or merged by him in the magnificent monastic establishments which he founded. Great as was the influence of the Northmen in retarding the fruits of early missionary zeal, it is obvious that they rarely so effectually despoiled the Christian establishments as to permanently eradicate them, or break the traditional sanctity which has consecrated their sites to the service of religion even to our own day. Iona, burned in 802, was rebuilt in 806. Sixty-eight of the brethren perished by the hands of the Pagan Northmen the same year: yet in 814, we again find them founding and building. It is impossible, therefore, to

[1] Bannatyne Miscellany, vol. iii. pp. 73, 74, (in the press,) translated by Dean Guild. 1554.

[2] Adomnan, vol. ii. p. 43; Smith's Life of Columba, p. 55.

avoid the conclusion that Christianity was very extensively diffused throughout North Britain, and that numerous ecclesiastical fraternities had been established on the mainland and surrounding islands long before the natives learned to watch the horizon for the plundering fleets of the Norse rovers.

It is not till the ninth century that we find authentic traces of the Scandinavian Vikings on the Scottish shores. While, however, we regard the Pagan Northmen in the light of lawless spoilers, preying on weaker or defenceless neighbours, we must beware of the error of supposing that they were no more than a barbarian race of pirates. On the contrary, they speedily substituted conquest for spoliation both in Scotland and Ireland, colonized the possessions they acquired, and established trade and commerce in lieu of robbery. They bore, indeed, no slight resemblance to the bold adventurers of a more civilized age, who followed Drake and Raleigh in their reprisals against Spanish America, and won reputation, still honoured in our naval annals, by means as inconsistent with the modern law of nations as the plundering expeditions of these old Scandinavian Vikings. The war-songs of the Northmen shew that such expeditions were the paths to honour as well as to wealth; nor was it till the milder tenets of Christianity had superseded the warrior-creed of Thor, that their plundering voyages came to an end. But unlike the British and Irish, the Scandinavians have a Pagan literature, contemporary with those scenes of adventure and bold deeds of arms: and so much the more valuable that it preserves a picture of the period uninfluenced by that corporate spirit which detracts so much from the contemporary monkish annals of our own and other countries. They had their *sagaman*, and their bard or *skjalde*, like the minstrel or troubadour of medieval Europe, whose chief business it was to rehearse the Sagas, and to compose songs and odes in commemoration of their victories and individual prowess. We must not, therefore, rob the old Pagan Norseman of the wild virtues of his age and creed, by bringing them to the standard of modern ideas and principles; but rather accept the characteristic picture of his Sagas as furnishing no unlikely portraiture of the hardy Caledonian warrior of an earlier age.

We know little that is definite regarding the Scandinavian expeditions to our shores till Harold Harfager, king of Norway, in the latter part of the ninth century, conquered first the Zetlands and then

the Orkney Islands and Hebrides, and made himself master of the Isle of Man. The change from having the Norsemen as plunderers to that of having them as masters, was probably altogether beneficial, though not unaccompanied with much violence and suffering. Previously to this period, their ravages appear to have been incessant, and very frequently successful, both on the Scottish and Irish coasts. They repeatedly assailed and plundered the Christian community of Iona; and the annals of Ulster record that the Gentiles, as they are usually termed, completely spoiled the establishment in the year 802, and expelled the family of Iona from the sacred Isle. They seem to have treated in a like manner the various religious communities settled on the different islands above referred to, and still commemorated in the old Scandinavian names which they conferred on them; though, as has been shewn, the followers of St. Columba, and no doubt other fraternities, speedily rebuilt their establishments. Even at that early period, some amount of wealth would be accumulated in the muniment chests of the monasteries, and doubtless the poorest of them would endeavour to provide the chalice, paten, and other indispensable furniture of the church and altar, of the precious metals. These must have supplied a fresh incentive to the plundering Vikings, and thus the early incursions of the Northmen largely contributed to retard the diffusion of the faith among the native Britons, while their own divisions and internal struggles furnished frequent opportunities for the unchecked descent of the spoilers on their coasts. Nor was it plunder alone that the fierce Northmen bore away from our shores. Both the Irish annals and the Icelandic Sagas testify to the fact, that they frequently loaded their vessels with captives, both male and female, who were sold elsewhere for slaves. There even appear to have been regular markets in Norway and Sweden where the captive Scots and Picts were disposed of, and some of the names still in use in Iceland are believed to be derived from such foreign captives: the female slave having occasionally won the favour of her master, and been wedded even to leaders and kings. While, however, the Norse marauders were making descents with increased frequency on our shores, a revolution was taking place in Norway, somewhat akin to that which placed the Dalriadic chief on the Pictish throne. Harold Harfager, after a protracted struggle, established himself as absolute king of Norway; and such of the Vikings as had been active in opposing his ambitious projects could

no longer winter in safety within the *viks* or inlets of their indented coast, from whence they derive their name. Many of these, therefore, who had before paid occasional visits to our shores, now established their head-quarters in the Scottish Hebrides, the numerous bays and inlets of which afforded the shelter and protection for their long-oared galleys formerly sought in their native fiords. From this *point d'appui* they made incessant incursions on the newly-established kingdom of Norway, while they failed not also to harass and spoil the neighbouring Scottish coasts. Thus deprived of any settled home, and without an acknowledged leader, the Vikings assumed more than ever a piratical character, and became the terror of the whole north of Europe. King Harold failed not to offer effectual resistance to these rebellious Norsemen. Every summer the Norwegian fleet scoured the Scottish Seas, and compelled them to abandon their Hebridean settlements; but the hardy Vikings had little to fear from assailants who only drove them to the open sea, from whence, after a successful descent on some unguarded coast, and not unfrequently on that of their assailant, they returned in winter to the shelter of their old retreat.

After repeated expeditions of the same fruitless character against the rebellious Vikings, King Harold determined to put an end to their predatory incursions by making himself master of the islands which afforded them shelter. Accordingly, in the year 875, he collected a powerful fleet, which he commanded in person, and setting sail from Norway, he bore down on the Shetland and Orkney Isles and the Hebrides, slaying or driving out the piratical Vikings, spoiling their settlements, and taking possession of the islands. He then proceeded to the Isle of Man, which he found entirely deserted of its inhabitants, who had fled to the Scottish mainland on the approach of the fleet. Harold failed not to enrich his followers with the spoils of the Scottish coasts as they returned from this successful expedition, so that the unhappy natives were exposed to equal dangers from the Vikings and their Norwegian conquerors. They were not, however, reduced to abject fear by such repeated assaults. Harold bestowed the possession of the Northern Isles on Sigurd, the brother of Rognwald, a distinguished Norwegian chief, who accordingly became first Jarl of the Orkneys; and the fleet returned to Norway, leaving a force deemed sufficient to secure the newly conquered possessions. But the native chiefs of the islands and neighbour-

ing coasts who had been spoiled and driven from their possessions by the Vikings, took advantage of their dispersion, and so soon as the Norwegian fleet had left the Scottish seas, they seized possession of the Hebrides, expelled or put to the sword the whole of the Norwegians left by Harold to hold them in his right, and resumed the occupation of their ancient possessions. A second Norwegian expedition followed under the guidance of Ketil, a distinguished chief, on whom Harold bestowed by anticipation the title of Jarl; and it is curious that in the "Islands Landnamabok," the natives who had recovered possession of the islands are termed Scottish and Irish Vikings, (*Vikinger Skotar ok Irar,*) sufficiently shewing the sense in which that term was understood by the Northmen in the beginning of the twelfth century. The Islesmen were unable to resist the overwhelming force, and appear to have been taken entirely by surprise. The Hebridean Jarl entered quietly into possession of his new dominions, and then took the first favourable opportunity of renouncing his allegiance to Harold and declaring himself independent King of the Hebrides.

It is not necessary to do more than glance at the subsequent history of the Scoto-Norwegian kingdoms. In 894, Thorstein the Red, the grandson of Ketil, formed a close alliance with Sigurd, then jarl of Orkney, and with their united forces they made themselves masters of the northern districts of Scotland, including Caithness, Sutherland, Ross, and Moray. Sigurd lost his life in this expedition in a remarkable manner. Having, according to the narration of the Ynglinga Saga,[1] slain Melbrigda Tönn, or Maolbride the Bucktoothed, one of the Scottish maormors or chiefs who derived his appellation from a peculiarly prominent tooth, he cut off the Maormor's head and hung it at his bridle. But from the violent motion as he galloped over the field, the tooth inflicted a wound on his leg, which inflamed, and ultimately caused his death. The record of this incident in contemporary sagas may suffice as an illustration of the barbarous warfare of the period. Sigurd was succeeded by his son Guttorm, as Jarl of Orkney, while Thorstein the Red assumed the title of king of the newly acquired possessions on the mainland; and thus within half a century after the Dalriadic king Kenneth had obtained possession of the throne of the Southern Picts by the aid of the Cruithne or Northern Picts, a large portion of the possessions of the latter were wrested from them and erected into a new kingdom under their foreign con-

[1] Ynglinga Saga, Coll. de Rebus Albanicis, p. 65.

queror. The sovereignty of Thorstein, however, was of brief duration. He had scarcely held his newly acquired territories for six years when he had to take the field to oppose a force collected by the chiefs of the conquered possessions, under the command of Duncan, the maormor of Caithness. A fierce battle ensued, in which Thorstein was slain, his followers completely routed, and the Norwegians expelled from the Scottish mainland. This took place A.D. 900, and for nearly a century no farther aggression was attempted by the Norwegians, with the exception of the annexation of a part of Caithness to the Orkney jarldom, the result, as is believed, of an alliance between Thorfinn, the Orkney jarl, and the daughter of Duncan, maormor of Caithness. In A.D. 986 Sigurd, jarl of Orkney, once more conquered the north of Scotland, after having defeated Finlay, son of Ruari, maormor of Moray, in an attempt to recover Caithness from its Norwegian possessors. Frequent battles followed. The Norwegians were repeatedly defeated and driven from the mainland: but they returned with increased force and re-established their ground. Meanwhile, by the defeat and death of Kenneth M'Duff, Malcolm, maormor of Moray, became king of Scotland A.D. 1004, and soon after effected a reconciliation with Sigurd, jarl of Orkney, and gave him his daughter in marriage. Thus a mixture of Norwegian and Scottish blood took place, the fruit of which is still discernible in the striking contrast between the population of the northern islands and Scottish mainland and the Celtic races of the neighbouring Highlands.

Alternate friendly alliances and open warfare followed till A.D. 1034, when the Norwegians once more triumphed and obtained effectual possession of the greater part of the north of Scotland, where they established a kingdom under the powerful and talented Jarl Thorfinn, the son of Sigurd and of his wife the daughter of the Scottish king Malcolm, who thereby ultimately acquired a hereditary right to the Scottish crown, similar to that which is believed to have paved the way to the previous accession of the first Dalriadic king of Scotland. We have thus reached a period of Scottish history over which modern literature has thrown a fictitious but singularly romantic interest. The lineal race of Kenneth MacAlpin, the Dalriadic king, having become extinct, the succession reverted to Duncan the son of Crinan, a powerful chief who had married the daughter of the last king of the Scottish race. But the old Celtic ideas of succession proved irreconcilable with his assumption of the crown, and the per-

sonal character of Duncan was little fitted to cope with the difficulties of his situation. His unambitious spirit indeed prevented his forcing himself into collision with the Norwegians, or disputing with Thorfinn his newly acquired dominions; and had he been able to communicate the same disposition to his subjects, his reign might have terminated in peace. But after enjoying his throne for about six years, his people took advantage of the absence of Thorfinn on an expedition to England, and putting him at their head, forced their way into the district of Moray with little opposition. But the Pictish natives of the north refused to recognise the right of Duncan to the crown, or to accept him as a deliverer from the Norwegian yoke, and headed by MACBETH, the maormor of Moray, they attacked him in the neighbourhood of Elgin, routed his army and put him to the sword. Macbeth pursued his success, made himself master of the whole kingdom, and with the sanction of the Norwegian jarl assumed the title of King of Scotland. Thus strangely were the questions of regal legitimacy and national independence at variance. It appears to have been solely as a tributary to Thorfinn that Macbeth reigned over the southern half of Scotland. Repeated unsuccessful attempts were made by the adherents of Duncan's party to recover possession of the throne for his son. In one of these, A.D. 1045, Crinan the father of Duncan was slain, who is styled in the Annals of Ulster "Abbot of Dunkeld,"—lay impropriation and the marriage of the clergy having both been common in Scotland prior to the reform of its church by the Saxon princess who became the wife of Duncan's son. The expedition of Duncan had been undertaken while Thorfinn and the chief Norwegian forces were engaged in assailing the Saxon possessions in England. The sons of Duncan accordingly sought refuge at the English court; and when Malcolm Canmore, Duncan's eldest son, returned to avenge his father's wrongs, he was accompanied by a Saxon army under the command of his uncle, Siward Earl of Northumberland. In securing by such means the possession of the Lothians, which was all that Malcolm was able at that time to wrest from Macbeth, he paved the way for that second and most important change, known in Scottish annals as the Saxon Conquest. Four years afterwards Macbeth was defeated and slain in the battle of Lumphanan, and on the death of Thorfinn, in 1064, Malcolm Canmore obtained final possession of the entire Scottish mainland, though the Norwegian jarls continued to retain undisputed hold of the Northern and Western Isles.

Such is a slight sketch of that important era in Scottish history; from the intrusion of the Scottish race into the Western Highlands, to the final ejectment of the Norwegians from the Scottish mainland, and the restoration of the crown to a Celtic prince at the head of a Saxon army. It is impossible to conceive of the presence of Norwegian settlers for so long a period on the mainland of Scotland without their greatly affecting the character of the native population. From A.D. 895, when the first Norwegian kingdom was established in the north of Scotland, to A.D. 1064, when that of Thorfinn came to an end at his death, a very large portion of the north of Scotland had been repeatedly held possession of for a considerable period by the Norwegians. Long periods of peace and friendly alliance afforded abundant opportunities for intermarriage; and we see in the marriage of the Orkney jarl with the daughter of the Scottish maormor, a clear proof that no prejudices interfered to prevent such unions. This was still less likely to be the case during the reign of Macbeth, which lasted for eighteen years, as the closest alliance and community of interests then subsisted between the Northern Celtic and Norwegian races, and to this period therefore we probably owe the chief changes on the aboriginal Scottish race which still distinguish their descendants from the purer Celtic races of the south and west of Ireland. The genealogies of many of the old Highland chiefs, and the history of the clans, furnish evidence of this intermixture of the races; and the physical characteristics of the natives of several northern districts of the Scottish Highlands abundantly confirm the same fact. Yet it is surprising how very partial the influence of the Northmen must have been. We have proofs of the introduction of Runic literature, and also of the use of Runic characters by the natives; yet if we except the Isle of Man, a dependency of Scotland both before and after its occupation by the Northmen, we have only the merest fragments of inscriptions in the northern runes found in Scotland. On the mainland some few local names are traceable to a Scandinavian origin. In the Scottish Lowland dialect a considerable number of words and many peculiarities of pronunciation are manifestly derived from the same source; while in the Orkney and Shetland Isles, customs, superstitions, language, and even legal formulas, all clearly point to their long occupation as an independent Norse jarldom, or as a dependency of the Danish crown. In the Western Isles, however, it has proved otherwise. There the language and race are still

purely Celtic, and the ancient topographical nomenclature has been but slightly affected from their occupation by the Vikings and their Scandinavian successors. This is probably to be accounted for to a great extent by the fact, that the Hebrideans, like the natives of Man, fled on the occupation of their islands by the pirate Norsemen, and only very partially returned after the establishment of law and order under Ketil, the independent Norwegian jarl; so that these islands have been to a great extent colonized anew from the neighbouring mainland. Still extensive and durable traces remain to commemorate the intrusion of this race of northern warriors on the older colonists of Scotland, nor can we hesitate to ascribe somewhat of our peculiar national character and physical conformation to that intimate intercourse which prevailed more or less extensively for nearly two centuries, and indeed in the Orkney and Shetland Islands for a much longer period, between the Norwegian and Celtic races. On Scotland, as a whole, the influence of this Scandinavian colonization and conquest has been much more direct and effective than any results of the Roman Invasion. But both of these historic changes suffice to account for only a very few of the national peculiarities, or of the distinctive features of our earlier arts, and still require us to look to native sources for the larger number of archæological relics, and for the most characteristic classes of monumental remains.

CHAPTER II.

SCULPTURED STANDING STONES.

The progress of our inquiry into the peculiar characteristics of Scottish Archæology brings under consideration one of the most interesting, yet most puzzling classes of monuments of early native art. While England has her Anglo-Saxon ecclesiastical remains exhibiting more or less distinct traces of the transition by which the debased Roman passed into the pure Romanesque or Norman style, Scotland, along with Ireland, possesses examples of an early native style of ecclesiastical architecture and of Christian monuments, belonging to the same undefined period prior to the Norman invasion of England.

Of the Sculptured Standing Stones of Scotland, including these primitive Christian monuments, a few of the best known examples have been repeatedly engraved, but generally on so small a scale, and with so little attention to accuracy of detail, that they have failed to secure that interest among British archæologists which their great number and the very beautiful and singular character of their sculptures merit. The reproach of leaving these remarkable national monuments unillustrated has, however, been to a great extent removed by the publication of Mr. Patrick Chalmers' magnificent work on the Ancient Monuments of the County of Angus,[1] which furnishes an extensive series of examples of the various sculptured stones long ascribed to a Danish origin, but now nearly all recognised as peculiar

[1] The Ancient Sculptured Monuments of the County of Angus, including those at Meigle in Perthshire, and one at Fordoun in Mearns, by Patrick Chalmers, of Auldbar, Esq. Bannatyne Club.

to Scotland. Attempts to decorate Scottish sepulchral memorials by means of sculptured ornaments appear to have been made from an early period. Several curious examples have already been noted of stone cists, otherwise entirely unhewn, the covers of which have been rudely ornamented with incised patterns similar to those which are seen on the gigantic chambered cairn of New Grange, near Drogheda. But greater interest perhaps attaches to another though more simply decorated Scottish cist pertaining apparently to a much later period than the cairn of New Grange, or the incised cists which have been classed with that remarkable primitive sepulchre. On a rising ground about half a mile to the east of the town of Alloa, called the Hawkhill, is the large upright block of sandstone sculptured with a cross which is represented in the annexed engraving. It measures ten and a quarter feet in height, though little more than seven feet are now visible above ground. A similar cross is cut on both sides of the stone, as is not uncommon with such simple memorials. During the progress of agricultural operations in the immediate vicinity of this ancient cross, in the spring of 1829, Mr. Robert Bald, C.E., an intelligent Scottish antiquary, obtained permission from the Earl of Mar to make some excavations around it, when, at about nine feet north from the monumental stone, a rude cist was found, constructed of unhewn sandstone, measuring only three feet in length, and at each end of the cover, *on the under side*, a simple cross was cut. The lines which formed the crosses were not rudely executed, but straight and uniform, and evidently finished with care, though the slab itself was unusually rude and amorphous. The cist lay east and west, and contained nothing but human bones greatly decayed. Drawings of the cross and cist, and a plan of the ground, executed by Mr. Bald, are in the possession of the Society of Antiquaries. Here we possess a singularly interesting example of the union of Christian and Pagan sepulchral rites: the cist laid east and west, according to the early Christian

custom, yet constructed of the old circumscribed dimensions, and of the rude but durable materials in use for ages before the new faith had superseded the aboriginal Pagan creeds.

To this same transition-period there can now be little hesitation in assigning that remarkable class of Scottish sculptured stones, decorated most frequently on the one side with the figure of the cross, and on the other with a few mystic symbols of constant recurrence which still remain an enigma to British Antiquaries, and to most others a subject of perfect indifference or contempt; though had they been discovered on the banks of the Tigris or the Nile they would have been thought worthy of the united efforts of European scholars for their solution. Some of these monuments most probably belong to Pagan times, as they contain only the mysterious symbols, unaccompanied by the emblem of the Christian faith, and are usually of ruder execution, and cut on unhewn stones. Of this class are the Standing Stones at Kinellar and Newton, Aberdeenshire;[1] and those of Aberlemno,[2] and Kirktown of Dunnichen, in Angusshire.[3] Theorists who have deemed it indispensable to assign to these singular monuments an antiquity long prior to the Christian era have supposed that the cross has been superadded to the older Pagan sculptures. No traces of any such hybrid union are now discoverable, but, on the contrary, where we find the Christian and Pagan symbols combined, they are almost invariably accompanied with elaborately interlaced patterns and figures of dragons, serpents, and nondescript monsters, bearing a close and unmistakable resemblance to the decorations of some of the most ancient Irish manuscripts, nearly corresponding to the era of the introduction of Christianity into Scotland. Several of the beautiful initials from the Book of Kells, an Irish MS. of the sixth century, as engraved in Mr. West-

Dunnichen Stone.

[1] Archæol. Scot. vol. ii. Pl. vi. fig. 3; Pl. ix. fig. 3.

[2] Sculptured Mon. of Angus, Pl. vi. fig. 3.

[3] Ibid., Pl. xiv. fig. 1.

wood's Palæographia, bear a close resemblance to the style of ornament of these sculptures; while the interlaced knotwork on the case of the shrine of St. Maidoc, which Dr. Petrie conceives cannot be later than the eighth century, though less distinctly characteristic, and by no means peculiar to Ireland, very nearly corresponds in its details to the ornamentation frequently introduced on these Scottish monuments. Others, such as the Aberlemno and one of the Meigle crosses, are decorated with raised pellets or nail-heads, manifestly derived from the ornamental studs of the old British buckler, also to be found elsewhere; as on one of the Manx sanctuary crosses to be seen about a mile from St. Maughold's Church, in the Isle of Man. The arrangements of the figures in some of the Scottish monuments of this period, as in the celebrated Forres column, are also strikingly suggestive of intimate intercourse between Scotland and Ireland at the period of their erection, from their correspondence to such works as the beautiful crosses at Monasterboice. In this case, however, the Irish are evidently the later works, and are, indeed, assigned by Dr. Petrie to the early part of the tenth century.

The locality in which these remarkable monuments are found is also worthy of notice. No example occurs within the ancient limits of Dalriada, or on the western coast in the vicinity of Ireland, nor has any one been discovered south of the Forth, though met with both at Largo and St. Andrews, or north of the ancient southern limits of the Norse kingdom, if we except one now erected in the pleasure-grounds of Dunrobin Castle. Yet it is within the same limited range of country, extending along our eastern coast, that the only examples of primitive ecclesiastical architecture occur undoubtedly pertaining to the Scottish Celtic Church prior to its remodelling in the eleventh century.

No sculptured memorials of the singular class so abundant in Scotland, have been discovered in Ireland, any more than in Norway, Sweden, or Denmark, though so long ascribed to a Scandinavian origin. They are manifestly native monuments, though betraying the same traces of the influence of early Irish art, or at least indications of a period when the peculiar style of their ornamentation was common both to Scotland and Ireland, with which we are familiar in the works of the closing Pagan era. Only one known period of Scottish history answers to these requirements, and seems to point out the ruder class of sculptured standing stones as the monuments of

the Pagan Picts, and the more elaborate ones, accompanied with the symbol of the Christian faith, as belonging to that period which has been slightly sketched in a preceding chapter, when Christianity was introduced to the Scottish Picts at the very time in which we possess numerous proofs of the most intimate intercourse between the two countries. What we chiefly want at present for the elucidation of Scottish Archæology is not theories but facts; yet such historical coincidences, though doubtless open to challenge, are not unworthy of note, and cannot justly be ranked along with the vague theoretical speculations, destitute of any foundation but the fancy of their originators, which have discovered in these Scottish sculptures Egyptian, Phœnician, Braminical, or Druidical symbols, as it chanced to suit the favourite theory of the hour.

The Dunnichen Stone affords a good example of the most frequent symbolic figures: the **Z** shaped symbol, sometimes, as in this case, intersecting two circles decorated within with foliated lines, and united most frequently by two reversed curves, or occasionally intertwined with a serpent. Along with these, there is also often introduced a crescent-shaped device —the favourite emblem of Druidical theorists—intersected by a **V** figure, more or less floriated, as on St. Orland's Stone at Cossins,[1] the Aberlemno Cross,[2] and many others. Ingenious theorists have recognised in these the initial Z, L, S, of Zodiacus, Sol, and Luna, and the key to a whole system of mystical enigmas! Another figure which occurs on the Dunnichen Stone has been discovered to be the *Atf*, or high cap of the Egyptian Osiris surmounted by a lotus! The same combination of symbols, however, is engraved on one of the remarkable silver relics found at Norrie's Law, Fifeshire, as shewn here the same size as the original. From this there can be no doubt that it represents an animal's, probably a dog's, head; and this is equally apparent on one of the crosses

[1] Sculptured Monuments of Angus, Plate xv. [2] Ibid., Plate v.

in the churchyard of Meigle, and also on what is called "King Malcolm's grave-stone" at Glammis, where the same figure accompanies the two-handed mirror. A writer in the Archæological Journal mentions having met with an almost precisely similar ornament to one of these symbols on Gnostic gems and coins bearing cabalistic inscriptions; and "hence he is led to think that the carvings on the reverse sides of these stones may have been intended to refer to the perpetual conflict between the Cross on the one hand, and false doctrines and worldly pursuits on the other. The Gnostic emblem being intended as an indication of the former of these principles, counteracting and opposing the spreading of the doctrines of the Cross, and the scenes of the chase (so frequently accompanying these sculptured emblems) as indicating the latter."[1] Such abstruse and recondite ideas, however, seem altogether irreconcilable with the age to which the monuments must be assigned, while they leave the main point still unsolved, as to how these symbols do indicate false doctrines or a Pagan faith. Two objects of domestic use, the mirror and comb, frequently accompany the more mysterious figures, and after being assumed by earlier antiquaries as the indications of a female monument, have more recently been traced to the supposed emblems of Christian martyrdom found sculptured on the tombs of the Roman catacombs. Dr. Maitland, however, has successfully combated this mode of explaining what were often no more than the implements of a trade or profession. Above the figures of a mirror, comb, and pair of shears, on one of the primitive Roman tombs, are the simple words VENERIÆ IN PACE, *To Veneria in peace*,[2]—indications apparently solely of the sex, or possibly of the occupation of the deceased. That these symbols were used in Scotland for the same purpose at a much later period, is proved by the sculptures on some medieval tombs, and in particular on that of the prioress Anna at Iona, who, though a religious, looks no martyr on her tomb. It is engraved by Pennant, (vol. ii. *Pl.* XXIV. fig. 2,) and more minutely, though in a greatly more imperfect state, in Mr. H. D. Graham's admirable illustrations of the Antiquities of Iona, (*Pl.* XLV.) Two angels arrange the pillow of the good prioress, a lady neither of spare nor youthful figure; while on either side of her are her little lap-dogs, each with a riband and bell to its neck, and over all the mirror and comb: possibly designed on this, as well as on the Roman lady's tomb, to

[1] Archæol. Journal, vol. vi. p. 90.

[2] The Church in the Catacombs, p. 180.

indicate the virginity or celibacy of the dead. Besides these figures of most frequent occurrence, however, others are also occasionally found curiously referrible to an eastern origin, and, in particular, a symbolic elephant, as on Martin's Stone at Ballutheron, on one of the crosses in the churchyard of Meigle,[1] and on the Maiden Stone on Bennochie, Aberdeenshire, where it accompanies the comb and mirror, from which the monument has probably derived its name.[2] The peculiar character of these singular representations of the elephant is well worthy of study from the evidence they afford of the existence of eastern traditions at the period of their execution. It is impossible to mistake the object intended by the design, while at the same time it is obvious that the artist can never have seen an elephant. What should be the feet are curled up into scrolls, and the trunk is occasionally thrown in a straight line over the back, whereas horses and other animals with which he is familiar are executed with great spirit and truth. Fabulous and monstrous figures also accompany these, such as the centaur occasionally bearing the cross in its hands, and what appears in some to be a branch of mistletoe, as on the reverse of another of the singular crosses in the churchyard at Meigle. On a stone near Glammis a man with a crocodile's head is introduced; on one of the Meigle crosses, among sundry other nondescript animals, is the capricornus or sea-goat; and on the inscribed cross of St. Vigeans a grotesque hybrid, half-bird half-beast, stalks among the fantastic animals and intertwining snakes which decorate its border.

A most lively fancy is apparent in many of these designs; but others are possessed of a much higher value as illustrations of the manners, customs, dresses, weapons, musical instruments, &c., in use at the period when these monuments were erected. Thus in the very curious piece of sculpture figured in the annexed engraving, we have a representation of the use of the bow and arrow, and of a car drawn by two horses. It is now preserved at Meigle along with others, the supposed relics of the tomb of the frail Guanora, Arthur's queen, who, according to Hector Boece, was made captive by the Picts, after the defeat and death of Modred on the banks of the Humber, and passed the remainder of her life in captivity within the strong fortress of Dunbarré or Barry Hill. Thus strangely do we find the romantic tales of the old troubadours, once familiar through medieval Europe,

[1] Sculptured Monuments of Angus, Plates VII. and XVII.

[2] Archæologica Scotica, vol. ii. Plate VI. fig. 2.

located by popular tradition in the district of Strathmore. Mr. Chalmers conceives that scarcely a doubt can be entertained of the reference to the monument at Meigle ascribed to Queen Guanora, and

Meigle Stone Car.

of which the engraving represents one of the most curious portions, in the following note, under the year 1569, in the Extracta e Cronicis Scotiæ:—"At Newtylde[1] thair is ane stane, callit be sum the Thane Stane, iii eln of heicht, v quarteris braid, ane quarter thik and mair, with ane cors at the heid of it, and ane goddes next that in ane cairt, and twa hors drawand hir, and horsmen under that, and fuitmen and dogges, halkis and serpentis: on the west side of it, ane cors curiouslie grauit; bot all is maid of ane auld fassane of schap. It is allegit that the Thane of Glammis set thir tua stanis quhen that cuntrey wes all ane greit forrest." This description is of great value, not only as preserving a tradition associated with the stone at a period very near the time of Boece, yet differing entirely from his romantic tale of Queen Guanora, but much more so, in that it conveys a tolerably definite idea of what the monument actually was in the sixteenth century.

The traditions associated with these singular monuments, whether gathered directly from vague local traditions, or culled from the marvellous pages of the monkish chroniclers, are equally contradictory and valueless, as throwing any light on their origin, whether associated with King Arthur and his ravished Queen, or, like the remarkable Forres obelisk, popularly called King Sueno's Stone, believed to commemorate the final defeat and ejection of the Norsemen from the Scottish mainland. This beautiful monument, which measures twenty-

[1] Newtyle and Meigle are villages within two miles of each other.

PLATE IV

ST ANDREWS SARCOPHAGUS

three feet in height, has been repeatedly engraved;—by Gordon, on a sufficiently large scale, but with little attempt at accuracy of detail, and more carefully by Cordiner in his Scottish Antiquities.

There can be no question that many of those sculptured monuments are designed to commemorate particular events, though they have long since proved faithless to their trust. Most of such, however, would probably be of less interest to us than the minute and varied information which we are still able to deduce from the primitive historic memorials. We see in them the warrior on horseback and on foot, armed with sword, spear, battle-axe, and dirk, and bearing his circular buckler on his arm,—a much larger shield than that previously described among the later relics of the Pagan era, and, indeed, closely resembling the Highland target, which continued in use in Scotland till the final extinction of the patriarchal system and hereditary customs of the Highland clans; after their last struggle on Culloden Moor. Nor are the sculptures less minute in their illustrations of domestic habits and social arts. In Plates II. and VI. of Mr. Chalmers' valuable work, we have representations of ancient chairs, and figures apparently of priests and monks. In the former, also, and in Plate XIII., are a harp and harper, the latter executed with much spirit, though now greatly defaced; while hunting and hawking scenes frequently occur, accompanied with very graphic representations of the beasts of chase. There is, moreover, a peculiar style running throughout the whole of these sculptures, and a certain action and contour in the figures and animals, which mark them with as distinctive a character as belongs to any medieval or modern school of art. The engraving on Plate IV. represents one of the most elaborate of these Pictish hunting scenes, fully answering to the description of the old Scottish chronicler, of "horsemen, fuitmen, and dogges, halkis and serpentis." It occurs on what is believed to have formed part of a stone coffin, which was dug up in the immediate vicinity of St. Andrew's cathedral, and is now preserved in St. Mary's College there. Along with this slab, which measures five and three-fourths feet long, by two and one-fourth feet broad, there was found what appears to have formed one end, and part of the other, of the same sarcophagus or monument. Both are covered with intricate knotwork, and in the more perfect of the two there are four compartments, two of which are occupied each with a pair of apes, and the others with globes, each encircled with two serpents. Not the least curious feature of

this elaborate design is the introduction of well executed apes and other animals, which we would have supposed entirely unknown to the ancient sculptor. Besides these the ram, the horse and hawk, the fawn, the greyhound pursuing the fox in the thicket, and the tiger or leopard, as the fierce assailant of the horseman seems to be, are all executed with great fidelity and spirit. In addition to these there is a nondescript monster, a sort of winged griffin, preying upon a prostrate ass. But by far the most valuable portions of this curious design are the human figures, with their variety of character and costume. Here manifestly is the Patrician, with his long locks and flowing robes, and his richly decorated dirk at his side, while the plebeian huntsman betrays his humble rank, not only in his homely dress and accoutrements, but even in the lean and half-bred cur which forms his companion in the chase. But the engraving will furnish a much more satisfactory idea of these curious details than any description could convey. The most common decoration of this remarkable class of native Scottish monuments, apart from the symbols and sculptured figures so frequently introduced, is the interlaced knotwork which appears to have been so favourite a device of Celtic art. It occurs on the sculptures, the jewelry, the manuscripts, and the decorated shrines and book-cases of early Irish Christian art, and has been perpetuated almost to our own day on the weapons and personal ornaments of the Scottish Highlanders. The annexed illustration represents a very characteristic example of the common Highland brooch, from the original in the collection of C. K. Sharp, Esq. It is of brass, rudely engraved, evidently with the imperfect tools of the native mountaineer. The tongue is of copper, and the brooch measures four and one-tenth inches in diameter. Amid its decorations will be recognised the triple knot, the supposed emblem of the Trinity, along with

other interlaced patterns, such as occur in the bosses of sepulchral and monumental crosses of the seventh and eighth centuries. Precisely the same ornaments may be seen on the Highland targets, preserved among the memorials of the field of Culloden; while other combinations of this favourite pattern formed the universal decoration on the handle of the Highland dirk, from the earliest known examples to those belonging to the same fatal field, on which the unbroken Celtic traditions of Scotland were involved in the fortunes of the fated Stuart race.

Celtic Dirks.

Only two of the ancient sculptured standing stones peculiar to Scotland are accompanied with inscriptions. One of them, discovered about thirty years since, on demolishing the ancient Church of Fordoun, in the Mearns, was then apparently undecipherable,[1] and has since become illegible; the other is on a beautiful though mutilated cross in the churchyard of St. Vigeans. That of St. Vigeans is in the common Celtic character familiar to us on early Irish monuments, and on the oldest tombs at Iona, and therefore in so far adds confirmation to the idea advanced as to the probable era of these sculptures. But it is imperfect and perhaps too mutilated to admit of intelligible translation, though sufficient remains in the first words, Cpoil en, to shew that it is of the usual character of Scottish and Irish Celtic monumental inscriptions.

"Mr. Petrie," says Mr. Chalmers, "is of opinion, from a portion of it which he has deciphered, that the monument is Pictish, and he expresses a hope that he will be able to explain the inscription." But as the legible fragment seems to consist of only three words and part of a fourth, no very valuable information can be looked for from its fractional remainder.

One other peculiar and indeed altogether unique inscription occurs on a rude unhewn standing stone of granite in the vicinity of the

[1] Archæol. Scot. vol. ii. Plate v.

Maiden Stone, with its mysterious symbols, at Newton, in Garioch, Aberdeenshire. The column measures fully six feet in height, and about two feet in greatest breadth. On its upper part is the inscription, extending to six lines, in large and sufficiently distinct, but entirely novel and unintelligible characters. It has been more than once engraved, and repeatedly submitted to eminent antiquaries, but still remains undeciphered. General Vallancey, the well-known Irish antiquary, professed to read the two first words of it. What indeed would he not have undertaken to decipher? These he rendered *Gylf Gomarra*, Prince Gomarra, apparently from some slight or fancied resemblance of the characters to the corresponding Roman letters, but his G and F are manifestly the same, and the whole still remains an enigma. The side of the same stone, however, bears another inscription, also shewn in part in the annexed engraving, which appears to have escaped the notice of earlier observers, though introduced as a mere ornament in the representation inserted in the Transactions of the Scottish Society of Antiquaries. It has recently been pronounced by Irish antiquaries an Ogham inscription, and as such, is an object of considerable interest, no other example of the use of that simple and extremely primitive character, which the older antiquaries of Ireland have made the subject of so many extravagant theories, having been discovered in Scotland. It does not necessarily follow that the two inscriptions belong to the same period, though found on one stone, but both are as yet equally dumb and irresponsive oracles.

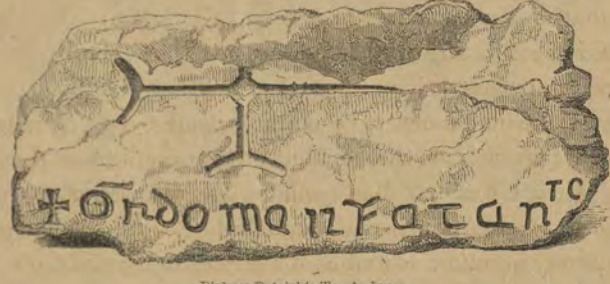
Various early inscriptions in the same old Celtic character as that engraved on the St. Vigeans' Cross are still to be found in Scotland, and particularly in the Western Isles, where it had doubtless been in general use, prior to the adoption of the later Church letters common to medieval Europe. Of this class are two stones at Iona, adorned with simple crosses, one of which has been made the subject of some very fruitless speculation. "No one of the inscriptions in Iona," says Mr. H. D. Graham, "has been so much written about as this, and anti-

quarians do not agree as to its signification. It is in the old Gaelic character, and has been usually interpreted into *Donull fada Chasach* —The cross of Donald Longshanks."[1] An older decipherer reads it, "*Cormac Ulphada hic est situs*," indicative of the sepulchre of Cormac Barbatus, one of the kings of Ireland, buried there A.D. 213; and a third assigns it as the memorial of a king of France, who according to equally credible tradition found his last resting-place in the sacred isle. Mr. Graham has accordingly designated it in his Illustrations of the Monuments of Iona, "the disputed inscription," though finding for it a new reading, which assigns it to a Macdonald of the Glengary line, A.D. 1461. The inscription reads: Oꝑ do mail Patapic, or with the first word extended:

+ OROIT DO MAIL PATARIC

A Prayer for the servant of Patrick.

Its modest memorial is sufficiently indefinite, yet it may be assumed with much probability to mark the tomb of Bishop Patrick, whose demise is thus recorded in the Annals of the Four Masters, under



Bishop Patrick's Tomb, Iona.

A.D. 1174: "Maol Patrick O'Banan, Bishop of Conor and Dal Araidhe, a venerable man, full of sanctity, meekness, and purity of heart, died happily in Hy of Columkille, at a good old age."[2]

Another rude and unsquared slab, with a slightly ornamented cross, bears the still simpler inscription: Oꝑ aꝑ aꝑmin Eogain, *armin*, or more commonly *armunn*, being a brave man or chief. Extended it reads:

OROIT AR ARMIN EOGAIN

A Prayer for the Chief Eogain or Ewen.

Eogan or Eoganan, of the Albanic Duan, commenced his reign over

[1] Monuments of Iona, by H. D. Graham, Esq., p. 16.

[2] Annals of the Four Masters, translated by Owen Connellan, Esq., p. 8.

the Dalriads in A.D. 801, and subsequently wrested from the Southern Picts the territories conquered by Angus MacFergus, and governed for a time by princes of his line.[1] The name is not uncommon among the early western chiefs; and the Lord of Argyle at the period of Haco's invasion in 1263, as appears from various early charters, was Eugene or Ewen, son of Duncan, a descendant of the great Somerled.

Various other stones, with crosses cut upon them, evidently of the same date as those thus inscribed, lie scattered among the remarkable tombs of the Relig Oran, or St. Oran's Burial Ground,—that sacred spot, the resting-place of saints, and kings, and old island chiefs, so deeply interesting to every Scottish heart,—but these are the only examples of this early class on which inscriptions are now decipherable. Many of the tombs of a later date are ornamented with figures and floriated patterns in relief, characterized by singular beauty and great variety of design. The style of ornamentation on some of them is peculiar to the Western Isles and the neighbouring Scottish mainland: but such ample justice has been done to them in the recent beautiful series of views of the "Antiquities of Iona," by Mr. H. D. Graham, that it is unnecessary to resort to the less intelligible process of verbal description. The intermingling of foliage, scroll-work, chain-work, geometric patterns, and knotwork, with animals, figures, and sacred or warlike implements, is characterized by a profuseness and variety of design such as the sepulchral monuments of scarcely any other single locality or age can equal. The greater number of them however, belong to a later period than that now under consideration but on this very account, as well as for other reasons, we must dissent from the conclusions as to the origin of their style of art, advanced by the Rev. J. S. Howison, in his valuable papers on the Antiquities of Argyleshire. The well-ascertained dates of some of the most remarkable of these monuments fix their era from the fourteenth to the sixteenth century. The accompanying illustration supplies a characteristic example, in the mutilated cross of Lauchl[illegible] M'Fingon, the father of Abbot John of Iona, who died A.D. 1500, and had a more important tomb, adorned with his recumbent figure in full canonicals, within the cathedral, though his name figures on the cross in St. Oran's Chapel, erected as we may presume by himself. It is a valuable illustration for our present purpose, as the inscription and date are still perfectly legible: ✠ Hec : est : Crux : Laeclanni : Maic : Fingone

[1] Skene's Highlanders, vol. i. p. 53.

et : eius : filii : Johannis : abbatis : de : Hy : facta anno : domini : M° : CCCC° : LXXX° IX°. The *lymphad*, which figures as one of the herald's quarterings of the Mackinnons, is indeed believed to have been derived from the Northmen, but in the form it assumes on this and other Iona sculptures, it bears as little resemblance to the long-oared war galley so frequently engraved on native Scandinavian monuments and relics as the accompanying ornaments do to any known device of Northern origin. The late era to which some of the most characteristic of these sculptures belong, should alone suffice to disprove the idea "that the Scandinavians were the authors of this particular kind of art exhibited by the stone crosses, as also by the sepulchral monuments of Argyleshire;"[1] but no such monuments are now to be found in any of the Scandinavian kingdoms, and since the style must have arisen somewhere, it is surely not more difficult to conceive of it originating in Scotland than in Norway, Sweden, or Denmark. In so far as it is derived, its suggestive originals appear to have been much more Irish than Scandinavian. Its peculiar individuality, however, arises from the same cause as the very singular characteristics of Irish ecclesiology. Both Scotland and Ireland stood more apart than any other of the kingdoms of Christendom from the Crusades and other great movements which conferred so remarkable a homogeneity on medieval Europe. The earlier arts were consequently left there to develop new forms and modifications

Iona Cross.

[1] Antiquities of Argyleshire, Trans. Camb. Camden Soc., Part III. p. 177.

long after they had been elsewhere entirely superseded by the later styles of medieval art. At the period to which the beautiful monuments of Argyleshire are referrible that district stood singularly isolated, sharing only very partially even in the influences of Scottish art, and still less in its social progress, while at the same time the peculiar sanctity indissolubly associated with its ancient shrines kept alive the spirit in which these originated. Scarcely any circumstances can be conceived more favourable for the development of a new style of art; and hence not only the peculiarity but the endless variety discoverable on the monuments of Argyleshire, and especially in the Relig Oran of Iona. A Scotsman may be pardoned even for some excess of zeal in advancing his claims for sole hereditary right to that historic ground, and the moss-grown sculptures with which it is paved, where

> "You never tread upon them but you set
> Your feet upon some reverend history."

CHAPTER III.

THE NORRIE'S LAW RELICS.

THE most remarkable discovery of ancient personal ornaments and other relics of a remote period ever made in Scotland, was that of "THE SILVER ARMOUR OF NORRIE'S LAW," a tumulus or artificial mound which stands on the marches of the two estates of Teasses and Largo, in Fifeshire. The correspondence of the engraved devices on this collection of silver relics with the mysterious symbols which constantly recur on the sculptured standing stones of Scotland, has served, along with the singular character and great beauty of some of the ornaments, to confer on this discovery an interest attached to no other Scottish hoard. This feeling has not been lessened by the fact that only a very few of these precious relics have been preserved; while the imperfect, vague, and probably exaggerated descriptions of such as were destroyed, have not lessened the feelings of disappointed curiosity and regret with which archæologists refer to the discovery.

The Bay of Largo, on the northern shores of the Frith of Forth, is a large and well-sheltered indentation, furnishing the most accessible position for a safe anchorage and haven near the mouth of the Frith. In the sandy slope near the shore, at the head of the bay, the beautiful gold armillæ were found, in 1848, which have been already figured and described among the relics of a remoter period than that of which we now treat.[1] The remarkable tumulus which furnished the silver ornaments now referred to is situated on the estate of Largo, about three miles from the bay, and is affirmed to have been reputed

[1] *Ante*, p. 321.

in old local traditions, to cover the chief of a great army, deposited there with his steed, and armed in panoply of massive silver. Instances of the like popular belief have occasionally received such remarkable confirmation that they cannot be pronounced by the archæologist as altogether valueless.[1] In this case, however, it may admit of doubt if the origin of the tradition be not subsequent to the discovery. The Old Statistical Account refers to the tradition, that the Stone an of Lundin "are the grave-stones of some Danish chiefs who fell of battle with the Scots near the place;"[2] but the only allusion ma lis- to Norrie's Law is to be gathered from an addition to the descripti the of Largo Law, a well-known hill which rises about eight hundred fe me above the level of the sea, and formed of old one of the most prom to nent beacon-hills of Fife. "Besides this," the Statist remarks, "the t is are two other Laws. But it is evident that these have been artific When the cairn was removed from one of them a few years ago stone coffin was found at the bottom. From the position of the bone it appeared that the person had been buried in a singular manner: the legs and arms had been carefully severed from the trunk and laid diagonally across it."[3]

The precise facts connected with the opening of the tumulus of Norrie's Law, and even the year in which it occurred, are very uncertain, though the person by whom the valuable hoard was purloined still resides, in good circumstances, at Pitlessie in Fife. Conscious as he is of the appropriation of treasure which was not his own, and not yet entirely free from apprehension of the interference of the Scottish Exchequer to reclaim the fruits of his ill-gotten wealth, h t naturally declines all communication on the subject, and thus, as to q frequently results from the operation of the present Scottish law es treasure-trove, the history of the discovery is involved in impenetrabl mystery. It may be permitted us to reflect with some satisfactio that by the fears thus excited the depredator has not entirely escap punishment for the irreparable mischief which his wretched cupidi has occasioned.

So far as can now be ascertained, in or about the year 1817 an opening was made in the tumulus of Norrie's Law by a hawker or pedlar who frequented the district, and it is possible may have had his attention attracted to the mound by the popular tradition already

[1] Archæol. Journal, vol. vi. p. 259.
[2] Sinclair's Statist. Acc. vol. iv. p. 546.
[3] Sinclair's Statistical Account, vol. iv. p 538.

referred to, which, if it then existed, could scarcely escape him in his annual rounds of the parish. A stone cist was exposed within the tumulus, containing, it is said, no bones or other indications of human remains; but either in or near it were found the silver relics, which the discoverer removed piecemeal, and sold, as opportunity offered, to various silversmiths to be melted down and destroyed. In 1839, upwards of twenty years after this remarkable discovery, the attention of Mr. George Buist of Cupar was directed to the subject, in consequence of discovering that among a few fragments of the original hoard which had been rescued by General Durham, the proprietor of the estate, there were several relics marked with the same peculiar symbols which form so singular a characteristic of the sculptured standing stones of Scotland. Mr. Buist was then engaged in investigating this remarkable class of antiquities, and to the report which he published we are chiefly indebted for the knowledge we now possess regarding "The Silver Armour of Norrie's Law." Mr. Buist, with much industry and perseverance, gathered such information as was then recoverable from persons cognizant of the discovery, and in particular obtained from the country silversmith, who had been one of the chief purchasers of the stolen treasure, the following notes of various sales, by which we obtain a very satisfactory means of estimating the great extent and value of the original deposit:—

"For the information in regard to the lost portion of the Norrie's Law armour I have been indebted to Mr. R. Robertson, jeweller, Cupar, or to individuals to whom I have been by him referred. Mr. Robertson first made a purchase of £5, subsequently two of £10, and knew of another made by some one about Edinburgh to the amount of about £20, and is under the belief that perhaps as much as that here accounted for may have been carried away, and bestowed on various uses. This, by rough computation, may, together with what remains, be reckoned not much under 400 ounces of pure bullion. Mr. Robertson has, as may be readily supposed, a peculiarly distinct recollection of the forms of the various portions of the armour procured by him, and gives a most vivid description in particular of the rich carving of the shield, the helmet, and the sword-handle, which were brought to him crushed in pieces, to permit convenient transport and concealment. . . . . A considerable part of the armour was partially corroded, the alloy having been eaten away as if by some weak acid, exactly after the manner of that employed in certain operations of modern silversmiths. The bullion in this case was much more pure than in those cases where it remained solid and untouched. It was, in fact, reduced to the state of porous, brittle, spongy silver. The parts chiefly affected in this way were those lowest down, which seem to have suffered from long exposure to some subtle corrosive. The upper portions were

fresh, compact, and entire. In them the silver was nearly the same as our present standard."[1]

The report from which the above is extracted is illustrated with lithographic drawings of the relics in the possession of General Durham, and also with representations of the shield and sword-hilt, drawn apparently from the recollections of the silversmith. But even when brought to him, crushed and broken, it must have been difficult to form a just opinion of their original appearance; and after the lapse of upwards of twenty years, any attempt to recover their precise form or details from memory must be utterly worthless. Judging indeed from the fragments which remain, it may even admit of doubt if these silver relics ever included any armour or weapons of war. In 1849, Mrs. Durham of Largo House entrusted the silver ornaments rescued by General Durham, to the care of Mr. Albert Way for exhibition at a meeting of the Archæological Institute; and through the liberality of the Council I am now enabled to avail myself of the engravings then made from them. Profound as the regret must ever be with which we refer to this discovery, it is yet no slight matter of congratulation that even these few memorials of so remarkable a sepulchral deposit remain to furnish some evidence of its character, and the period to which it belongs. They were mostly picked up by the brother-in-law of the tenant, and another person, both now deceased; having, it may be presumed, been dropped by their original discoverer in his secret and guilty haste. The inquiry instituted by Mr. Buist led to the recovery of one of the bodkins, and also of one of the engraved scale plates mentioned in the following description. It is perhaps hardly now to be hoped for that any further additions will be made to the rescued waifs of this ravished treasure.

The most interesting of the whole relics are the two leaf-shaped plates of silver, engraved with the mystic symbol of such frequent occurrence on Scottish sculptured Standing Stones. One of the monuments of this class, though destitute of the peculiar symbols here referred to, was found in fragments on the Largo estate, and through the good taste of the late General Durham, has been again reunited, and erected upon a pedestal near the spot where it was discovered. On one side it bears as usual the figure of a cross, and on the other, horsemen, dogs, and other animals, most prominent among

[1] Report on the Silver Fragments in the possession of General Durham, Largo, commonly called the Silver Armour of Norrie's Law.—*Cupar*, 1839.

which is the symbolic elephant frequently found on the same singular class of memorials. Though destitute of the peculiar devices which confer so great an interest on the silver relics found in its vicinity, this monument is of great value as furnishing independent evidence of the prevalence of the same arts in this locality at the dawn of the Scottish Christian Period. The two leaf-shaped plates, one of which has already been figured,[1] are almost precisely similar. On one the marginal line is wanting which appears in the representation given in the last chapter, but some indications seem to shew that it has been burnished out. The devices on both are deeply engraved, and it is possible may have been enamelled. Mr. Buist describes in his report small lozenge-shaped plates of silver, which formed part of a rich coat of scale armour; referring, there can be little doubt, to these leaf-shaped plates, both of which he has figured. The one already engraved is the size of the original, which weighs 598 grains; the other corresponds in size, but is somewhat above eighty grains lighter in weight. But there is no indication of any means of attachment so as to unite them in a suit of armour, or suspend them to the dress of the wearer. The spirally decorated bosses at the broader ends are concave on the under side, and present no appearance of having ever had anything attached to them. The original destination of these singular relics is indeed involved in the same mystery as the peculiar symbols with which they are engraved.

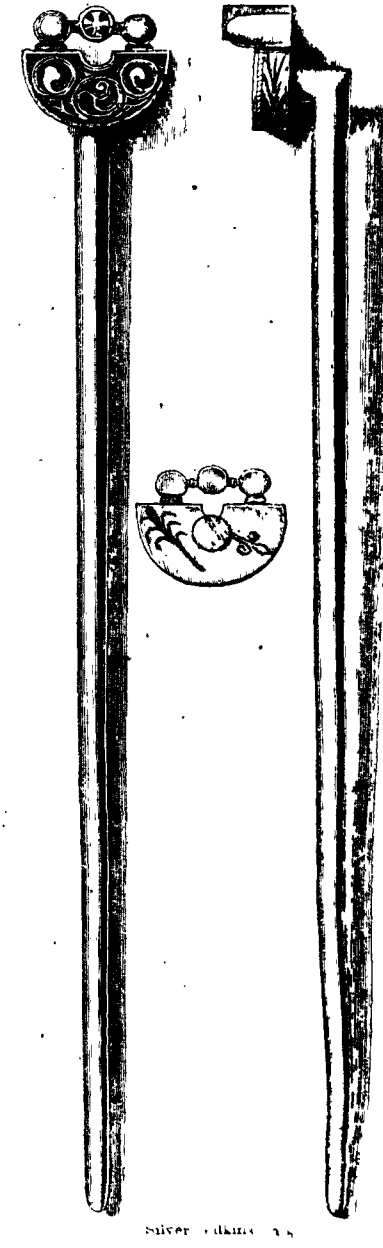
Next in interest to these scale plates of silver are a pair of bodkins, measuring in length rather more than six and a half inches, and engraved here the size of the originals. They are both alike, with the exception that on the reverse side of one is an imperfect indication of the Z symbol, the figure of which is interrupted by the attachment of the pin. The form of the head is peculiar, though not unique, pins of nearly similar fashion having been found in Ireland. A brass bodkin of this type, in the Museum of Trinity College, Dublin, is almost precisely the same in form and dimensions, and only differs in the ornament introduced in the front of the head.[2] Another example of the same type, found at Lagore, County Meath, is figured in the Archæological Journal.[3] It is made of bronze, and is inferior in point of workmanship, but is equally valuable from the undoubted evidence it

[1] *Ante*, p. 499.

[2] Historical Essay on the Dress of the ancient Irish, by Joseph C. Walker, M.R.I.A. Dublin, 1788, p. 15, Plate II. No. 4.

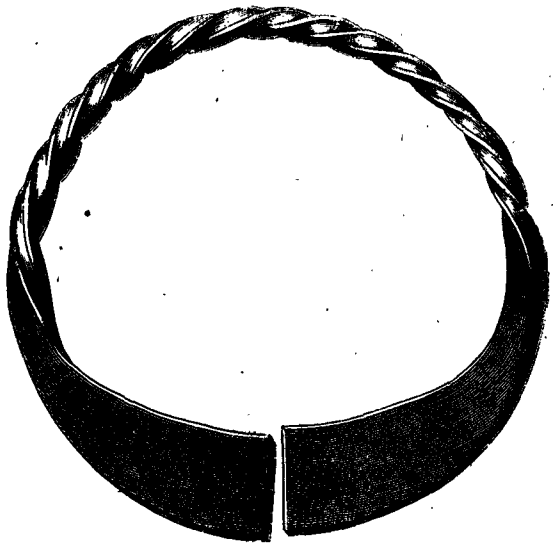
[3] Archæol. Jour. vol. vi. p. 105.

affords of the native origin of this peculiar form of pin, and of the other relics discovered along with it. The front of the head in the Largo bodkins is beautifully chased in the same style of ornaments as the scale plates, and the central projecting stud bears a Greek cross patée, thus presented; as on the Scottish sculptured stones, in connexion with these mysterious symbols. The mode of introducing the symbol on the bodkin is peculiarly suggestive of its use as a charm. It is engraved where it was evidently not intended to be seen, and where indeed its form is by no means adapted as a decoration to the peculiar shape of the work on which it is introduced. The spiral ornaments on the opposite side are, on the contrary, arranged for effect; and though corresponding to those on the double circles of the scale plate, are suggestive only of decorative design, the same peculiar form being greatly varied in pattern, and even frequently left blank on the sculptured stones. Another smaller pin of the same class is in the Durham collection. It appears to have been jewelled, but is very imperfect. It measures one and a quarter inch in length.



Two ornaments, described by Mr. Buist as "circles or armlets," appear to be the large ring fibulæ of a type common both as Irish and early Highland brooches. The most perfect of the two, which measures five and three-quarter inches

in diameter, is represented here half the size of the original. The *acus* or tongue is wanting in both of them. The torquated hoop is a rare feature in such ornaments, and indeed much seldomer found



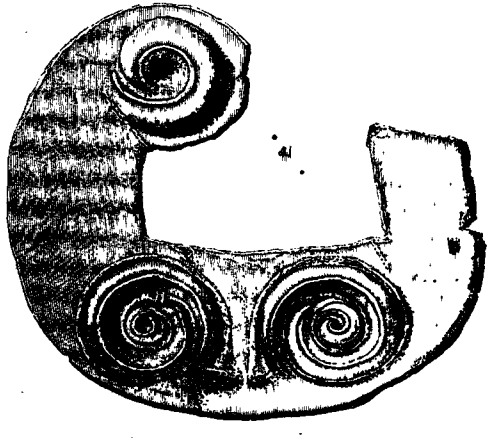
Ring Fibula.

in works of silver than of gold. It forms the simplest style of ornamentation, and, though by no means inelegant, corresponds very imperfectly with the fully developed style of art indicated in the other contents of the Largo tumulus, with perhaps the exception of a silver disc, figured in the Archæological Journal, half the size of the original.[1] This measures three inches in diameter, and has a central boss with a circular depression, which may not improbably have been set with a jewel of amber or stone. The torquated hoop of the silver fibula does not appear the best adapted for the free movement of the *acus*, but this seems rarely to have been much attended to. Where, as in these examples, the hoop is disunited, the *acus* is generally of great length, not infrequently measuring two, and even two and a half times the diameter of its circle. Nothing more was required for fastening such a fibula after the tongue had been passed through the dress, than to turn it slightly past the opening, for which purpose its perforation is always sufficiently wide. The revived taste for archæological pursuits has once more restored this ancient form adapted to

[1] Archæol. Jour. vol. vi. p. 255.

the fashions of modern dress, and one of the most favourite Scottish patterns bears the name of the Maid of Norway's Brooch.

It is less easy to assign a use for another of the Norrie's Law relics, engraved here half the size of the original. Mr. Albert Way describes it as "a plate of silver, enriched with singular scrolls or foliated ornaments in very high relief. Three of these remain; there was obviously a fourth, connected with the corresponding scroll by a narrow neck, the plate being formed with an irregular oblong opening in the centre. Dimensions of the plate, four and a half inches by four inches; length of the opening, two and a half inches; projection of the ornaments more than a quarter of an inch. They appear to have been cast, and are formed with great elegance of outline and skilful workmanship." It is obvious that the plate when complete had not been uniform. It would now be vain to speculate on its original purpose, though this appears to be the object described in Mr. Buist's report as the mouthpiece of a sword-scabbard; his whole ideas having obviously been modified by the local belief in the "suit of silver armour" in which the mounted warrior was interred. There is manifestly but little correspondence in it either to a modern sword-guard or the mouthpiece of its scabbard, and it bears not the slightest resemblance to any known appendage of ancient weapons.



The remaining relics of this hoard include two fragments of armillæ, formed of plain silver plates, beaten out so as to present a convex outer face; a double hook, one inch in length, in form of an S; a narrow band, like a riband of silver, about half an inch in width, and upwards of a yard long: one end, which appears perfect, tapering to a point; a fragment of fine interlaced silver; and a spiral silver ring, almost precisely similar in form to one of bronze found in a cist near Edinburgh, and figured in a former chapter.[1] It weighs

[1] *Ante*, p. 327.

120 grains, and is ornamented only with a minute serrated pattern wrought along part of the inner edge of the spiral bar of silver towards either extremity.

Such are the few but valuable relics which have escaped the crucible, amounting altogether only to about twenty-four ounces out of the estimated 400 ounces of pure silver found in the Norrie's Law tumulus by its unprincipled ravisher. That they exhibit the high progress attained by native artists at the period to which they belong can hardly admit of a doubt. The analogy which the forms both of the fibulæ and bodkins suggest—so clearly traceable to types of most frequent occurrence in Ireland—fully corresponds to the historic origin of the races and the arts of Scotland, already traced out in the previous chapter. Their peculiar devices, found only on the earliest Christian monuments of Scotland, no less distinctly refer these remarkable relics to that native transition-period from the fourth to the eighth century, when Pagan and Christian rites were obscurely mingled; and the revelations of the old sepulchral mound shew that the anticipations of the dying warrior still derived their most vivid power more from the heathen valhalla than the Christian paradise. We shall not perhaps greatly err in limiting the era of the Norrie's Law tumulus from the third to the sixth century. We must even allow for the lapse of a sufficient interval between the last surviving witness of the deposition of its treasures, and the advent of that new creed and system which finally abolished the sacredness that formed the old safeguard of the Pagan treasures of the dead. But in addition to every other cause of regret for the barbarous destruction of these beautiful examples of the arts as practised in Scotland a thousand years ago, we have reason to believe that an opportunity was lost—perhaps the only one that can ever occur—of ascertaining the precise epoch, and even the meaning of the remarkable Scottish symbols with which they were decorated. Mr. Buist remarks in his report,—"A considerable number of coins, now wholly lost sight of, and said to have borne these symbolic markings, were found along with the armour at Norrie's Law, and about forty of the same kind were found in an earthen pot at Pittenweem in 1822. It is said that these were destitute of inscription or written character." No great importance can be attached to such vague descriptions of coins chiefly derived from the recollections of persons probably little familiar with any but those of the present currency. But of the fact of coins

having been found no doubt can be entertained. Nor is this the only instance of such being met with in a Scottish tumulus, though hitherto they have only been discovered to be destroyed.

The most primitive form of Scottish coinage is evidently the simple gold pellets usually marked with a cross in relief. The two examples engraved here, the size of the originals, are from the remarkable hoard discovered at Cairnmuir, Peeblesshire, in 1806.[1] They resemble two segments of a sphere irregularly joined, and appear to have been cast in a mould. Forty of the same simple class of early currency were found, along with what appears to have been a gold funicular torc, in the parish of Dolphinton, Lanarkshire, and marked, like those of Cairnmuir, "with the impression of a star."[2] Little hesitation can be felt in assigning to the same class a discovery, in the parish of Dunnichen, Forfarshire, of "a number of small gold bullets, which seem to have been the current coin of the times when they were formed."[3] A correspondent describes to me a quantity of silver coins found about two years since in a cist exposed on the demolition of a cairn on the lands of Sauchie, Stirlingshire: "They were so thin that they readily broke in the workmen's fingers; they seemed struck through from the back, and had figures only on the one side; some of them had loops to hang them by." The whole of these are now dispersed or lost, their ignorant discoverers having seemingly contented themselves with the interesting experiment of trying how readily they could break them in pieces. There can be little doubt from the description that they were silver bracteates; and if so, their loss is greatly to be regretted. A cairn of peculiar construction is described in the Statistical Account of the parish of Garvoch, Kincardineshire, within which was found a silver brooch of ancient workmanship, and towards the margin upwards of twenty coins, but these would appear to have been a later deposit, as they included one of Alexander I., and another of Robert Bruce.[4] The valuable numismatic collection of the Society of Antiquaries of Scotland includes a few gold coins of the Gaulish type, believed to have been found in Scotland, but their history or exact locality is unknown. Mr. Lindsay, in his "View of the Coinage of

[1] *Ante*, p. 317.
[2] New Statistical Account, vol. vi. p. 57.
[3] New Statistical Account, vol xi. p. 146.
[4] Ibid., p. 38.

Scotland," justly remarks on the neglect of the investigation of this interesting subject, which, until the publication of his work, had been carried no farther back than the reign of William the Lion. To this he has added the history of upwards of a century, and made us familiar with some interesting early types. The earliest of these are of the Crux type of Ethelred II., of whose coins they are evidently an imitation, and are ascribed to the Norwegian jarls of the Hebrides. In the autumn of 1782, some men engaged in clearing away the foundation of an old wall in the island of Tyrie, one of the Hebrides, found an urn containing from fifteen to twenty ounces of Anglo-Saxon silver coins in fine preservation, ninety of these are now in the Scottish Society's collection, and include silver pennies of Athelstan, Eadmund, Eadred, Eadwy, Eadgar, and Eadweard the Martyr. In the present year, 1850, a large hoard of Anglo-Saxon coins was discovered in the Isle of Skye: upwards of ninety fell into the hands of one individual, and a much greater number were dispersed. By far the greater number are stykas of Eadgar. Barry mentions two horns found at Caldale near Kirkwall, in the Orkneys, containing three hundred coins of Canute, including forty-two varieties of mints, with silver fibulæ and other relics, already described along with a more recent discovery of a similar kind.[1] To these also should be added the occasional discovery of Cufic coins, inscribed in the old Arabic character, and ranging from the latter end of the seventh to the close of the tenth century. One of these, a fine gold coin, was discovered in 1823, at a considerable depth, in digging a grave in the churchyard of Monymusk, Aberdeenshire.[2] In all the discoveries referred to it is of special importance to our present inquiries to note that coins and other undoubted evidences of a comparatively recent date are rarely, if ever, found with gold relics of Archaic types. We rather see distinct reason to conclude that the stores of native gold and the direct sources of foreign supply were both nearly exhausted at an earlier period, and that silver, which chiefly belongs to the Iron or last Pagan period, was the metal used for purposes of personal adornment and display at the period when the peculiar native arts were developed which appear to belong to the dawn of the Scottish Christian Period. Whether derived from native or foreign sources, silver appears to have been then in greater abundance, and more lavishly employed for mere purposes of show than at any other period of our national history.

[1] *Ante*, p. 443. [2] Minute of Soc. Antiq. Scot., June 2, 1828.

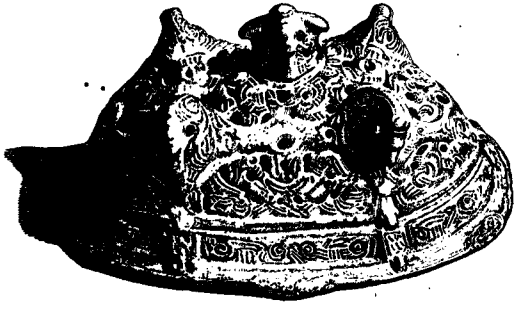
CHAPTER IV.

SCOTO-SCANDINAVIAN RELICS.

From the slight historical sketch introduced in a preceding chapter, we perceive that the plundering expeditions of the Norse Vikings, and the establishment of Norwegian dominion by Harold in the Northern and Western Isles, were rapidly superseded by the establishment of an independent Scoto-Norwegian kingdom, which diminished the direct intercourse with Scandinavia Proper, and led to some interfusion of the Celtic and Scandinavian races. To this period, therefore, we must look for the introduction of pure Scandinavian antiquities into Scotland, and also for the production of those native relics which bear manifest traces of the influence of Scandinavian art. In the Western Isles especially, where the expatriated Vikings of Norway fixed their head-quarters, and in Man, and the Orkney and Shetland Isles, where the first independent Scoto-Norwegian kingdoms were established, we may naturally look for many traces of Scandinavian arts.

To this period belongs the very characteristic and beautiful ornament, usually designated the shell-shaped brooch, and which is equally familiar to Scandinavian and British antiquaries. In Scotland especially, many beautiful examples have been found: several of them are preserved in the Museum of the Scottish Antiquaries, and from these the following is selected as surpassing in beauty of design and intricacy of ornament, any other example of which I am aware. It consists, as usual, of a convex plate of metal, with an ornamental border, surmounted by another convex plate of greater depth, highly ornamented with embossed and perforated designs, the

effect of which appears to have been further heightened by the lower plate being gilded so as to shew through the open work. In this example the gilding still remains tolerably perfect. On the under side are the projecting plates still retaining a fragment of the corroded iron pin, where it has turned on a hinge, and at the opposite end the bronze catch into which it clasped. The under side of the brooch appears to have been lined with coarse linen, the texture of which is still clearly defined on the coating of verd antique with which it is now covered. But its peculiar features consist of an elevated central ornament resembling a crown, and four intricately chased projections terminating in horses' heads. It was found in September 1786, along with another brooch of the same kind, lying beside a skeleton, under a flat stone, very near the surface, above the ruins of a Pictish house or burgh, in Caithness. It measures nearly four and a half inches in length, by three inches in breadth, and two and two-fifth inches in height to the top of the crown. Like many others of the same type, it appears to have been jewelled. In several examples of these brooches which I have compared, the lower convex plates so nearly resemble each other, as to suggest the probability of their having been cast in the same mould, while the upper plates entirely differ.



These oval brooches are most frequently found in pairs, and may be presumed to have been worn on the front of the shoulders or breast, as shewn in a curious piece of sculpture, evidently of nearly the same period, which is built into the church wall of Invergowrie. It is engraved in Mr. Chalmers of Auldbar's "Ancient Sculptured Monuments of Angus," (*Pl.* XXII.) and represents, apparently, three dignitaries, probably priests, as two of them hold books in their hands. The two outer figures are adorned with large brooches on their shoulders, while the central, and perhaps more important figure, is without them, but wears instead a circular ornament on the lower front of his garment. Along with the pairs of oval brooches is fre-

quently found a third, flat and sometimes trefoiled. One of these, referred to more particularly on a subsequent page, found along with a pair of oval brooches, in a barrow on the Island of Westray, in 1839, was first observed on the exposure of the skeleton, apparently laid on the abdomen, while the others were beside the ribs, as if worn on the breast. Another example from the Island of Sangay is figured in the Vetusta Monumenta, (vol. ii. *Pl.* XX.) A beautiful pair, made of a white-coloured metal, found under peculiar circumstances in a tumulus in Yorkshire, and another from the neighbourhood of Bedale, are figured in the Archæological Journal.[1] Various other specimens are preserved, both in public and private collections, but none of those that I have seen appear to equal in elaborateness or beauty of design, the Caithness brooch figured above.

Sculpture at Invergowrie.

By far the most remarkable relic associated with the period of Scandinavian invasion yet discovered in Scotland, is the beautiful Runic brooch, engraved on *Plate* I., which forms the frontispiece to this volume. It was found in the autumn of 1830, on the estate of Robert Hunter, Esq. of Hunterston, in the parish of West Kilbride, Ayrshire, within about an hundred yards of the sea, by two workmen who had commenced to quarry for stones. It lay quite close to the surface, at the foot of a steep cliff, called the "Hawking Craig," where the falcon still breeds,—a part of the Goldenberry hill, which bounds the extreme western point of Ayrshire. Between the Hawking Craig and the sea is a level piece of ground, where local tradition affirms that a skirmish took place, shortly before the celebrated battle of Largs, fought A.D. 1263,[2] when the fleet of King Haco was shattered by a tempest, and the Norse foe, already dispirited and greatly reduced in numbers, was totally routed, and finally driven from the Scottish mainland. In further confirmation of the local tradition Mr. Hunter adds,—"On the opposite side of the Hawking Craig, where

[1] Archæological Journal, vol. v. p. 220; vol. vi. p. 74.

[2] MS. Letter from R. Hunter, Esq., 4th April 1850.

the brooch was found, I discovered, in making a fence, some graves, composed merely of six rough stones, but with nothing inside but some charcoal, the bones being quite decayed. A short distance from this, at the foot of the hill, is the flat piece of ground assigned as the scene of the skirmish, in confirmation of which I discovered some graves there. A short way from this was a large cairn or tumulus of stones, wherein were found coins, &c.; but I just recollect, as a boy, the stones having been carted away: I found also an urn of unbaked clay, half filled with bones partially burned." It might admit of doubt if the Norsemen were likely to tarry on an enemy's coast, after so decisive a defeat, long enough to construct the cist and cinerary urn, and to rear the funeral pile, though we know that they were permitted to land, after the battle of Largs, in order to bury their dead. But we may dispense with the argument in this case, as we have not the slightest reason to imagine that the cinerary urn was in use, either by Scots or Norwegians, of the thirteenth century. In truth, the whole theory by which the remarkable relic now referred to is sought to be connected with the important historical event of the reign of Alexander III., is destitute of any satisfactory foundation. The locality is far removed from Largs, and not the slightest value can be attached to any local tradition of Norwegian skirmishes or battles. A reference to the old and new statistical accounts of the various parishes, along both the Ayrshire and Argyleshire coasts, will suffice to shew that the battle of King Haco has proved as infallible a source of explanation for the discovery of cists, tumuli, cairns, and sepulchral relics of every kind, as if it were a well authenticated fact that no one had died, from the days of Noah to our own, but at the battle of Largs!

Sturla, the Norse skald, has celebrated the gorgeous armament of Haco in the famous Raven's Ode, and disguises the extent of his monarch's defeat with the skill of a courtly bard; but in vain. King Haco gathered together the shattered remnant of his fleet, and bore away for Orkney, where he died, not many weeks after, of a broken heart. The old Norse skald thus refers to his earlier success, while the fleet was gathering along the Scottish shores, in sight of the Ayrshire coast:—"Our fierce veterans, feeders of wolves, hastened their fatal course through the mountains. In the fell battle mingling, Aleinn the Dauntless wreaked vengeance on the expiring foe. But now our sovereign encountered the horrid powers of enchantment. A

tempest, magic-raised, blew upon our warriors ambitious of conquest, and against the floating habitations of the brave. The roaring billows dashed shielded companies on the Scottish strand."

In one of the skirmishes which preceded the fatal encounter fought on Tuesday the 2d of October 1263, the beautiful brooch engraved on *Plate* I. is assumed to have been lost. Both the character of its inscription and the style of its ornament suggest the probability of its pertaining to a much earlier period; and even Danish antiquaries, while not unwilling to authenticate its Scandinavian origin, have sought for it a date one hundred and thirty-three years prior to the defeat of King Haco, and the final abandonment of the Scottish mainland by the Norwegian invader. The brooch is of silver, richly wrought with gold filigree work, and measures four inches and nine-tenths in greatest diameter. It is also set with amber, and is in a nearly perfect condition. The only injury it has received, with the exception of the point of the acus being broken off, is in some of the amber settings, occasioned either by the action of the weather, to which it was exposed from lying so near the surface, or possibly from the frequent burning of the whins which abound along the cliff where it was found. But the most remarkable feature of this beautiful personal ornament is an inscription engraved in large Runic characters on its under side.

Shortly after the discovery of this interesting relic, it was exhibited to the Society of Scottish Antiquaries, and Mr. T. G. Repp, a native of Iceland, familiar with Runic literature, read the inscription thus:—

ᛘᛅᛚᛅᚱᛁᚦᛅ : ᛅ : ᛏᛅᛚᚴ : ᚦᛁᚮ :: ᛏᚬᛚᚴ : ᚬᚮᚠᚱᛁᛏᚬ :

Maloritha á dalk this; Dólk Osfriđo; which he thus translated: Maloritha possidet hanc fibulam; Fibula Osfridie. At the same time drawings of the brooch were made, and a cast in sulphur was taken from the inscription, which is now deposited in the Museum of the Scottish Antiquaries. This valuable historic relic, which is here for the first time presented to British archæologists, has attracted considerable attention among Danish antiquaries. It was made the subject of a learned communication by Finn Magnusen, in the *Annaler for Nordisk Oldkyndighed og Historie* for 1846, (pp. 323-599,) but it admits of doubt if he has been more successful in the correct rendering of this than of the well-known Runamo or Ruthwell inscriptions, though he is equally precise in assigning to our Ayrshire brooch a definite date and owner, as in identifying Offa, and the other historical

characters of whom mention is made, according to certain readings of the Ruthwell Runes.

The inscription on the brooch is traced in large Runic characters, of which an exact fac-simile is introduced in the frontispiece, and differs essentially from any readings hitherto given of it by Danish antiquaries. Professor Magnusen's version, furnished by the late Mr. Donald Gregory, then Secretary of the Society of Antiquaries of Scotland, was probably only a copy of that made by Mr. Repp, though he reads the second name ᛋᚩᚠᚱᛁᛏᚺ, and contrives to elicit a vast deal more significance from the brief legend than its former translator dreamt of. He renders the first part—MALFRIÞA A DALK ÞIS; and translates it, *Malfritha is the owner of this brooch.* In this Malfritha he ingeniously discovers the Norwegian Queen Malford, a Russian princess who lived about A.D. 1130, while he finds in the Osfrido of the latter part of his version, Astrith the wife of King Svenir. A passage, moreover, in the Saga of King Haco, wherein the monarch complains of having been despoiled in infancy of all his inheritance save a BROOCH and a ring, completed the coveted cycle of historical identification, and here accordingly we have the brooch of King Haco, and an undoubted memorial of the Battle of Largs! A glance at the fac-simile of the inscription will shew how much imagination had to do even with the literal elements of this unparalleled discovery. In adapting the first name to his historical romance, Professor Magnusen reads ᛋ as F, not only without any authority, but even while recognising the regular ᚠ, or Runic F, in the second name—a needless liberty as will appear. The word ᚦᛁᚩ is no less a creation of the fancy. The mark which appears to have been construed into the terminating circle of the ᚩ, and to have given some show of probability to the others, being only the head of one of the silver rivets, which chances there to protrude in the middle of a line.

Meanwhile let us glance at the safer guidance which pure archæological evidence supplies. In addition to the inscription, I have introduced in the drawing, portions of the ornamental borders running along the outer and inner edges of the brooch. The Irish antiquary especially will recognise in these the familiar interlaced patterns to be found on nearly every native ecclesiastical and personal ornament pertaining to the early Christian period prior to the first appearance of the Northern Vikings, and with these the entire design and ornamentation correspond. But for the inscription, in fact, no one would

have dreamt of assigning to the brooch a foreign origin; yet it does not seem to have ever occurred to the Scottish antiquaries to whom it was submitted, that the inscription might also be native, and equally Celtic with the workmanship. It will be seen that a rude chevron pattern is engraved on the back of the brooch, cut in the same style as the inscription, evidently the work of very different, and no doubt later hands, than those of the original jeweller. The whole reasoning, both of Scottish and Danish antiquaries in relation to this interesting relic, has heretofore proceeded on the assumption that a Runic inscription must have a direct Scandinavian origin: a conclusion by no means necessarily resulting from the use of Runes in Scotland at the date assigned to this one, after alliances and intermarriages had long existed between the Scandinavian and Celtic races of Scotland.

The Runic monuments of the Isle of Man present some remarkable features, manifestly pointing them out as the product of a Scandinavian colony in close alliance with a native Celtic population, and possessed both of a language and style of art resulting from the intercourse of these diverse races. The Manx Runic alphabet appears also to have some literal peculiarities altogether singular, though probably once common to the Hebrides and Northern Isles, and found also, as might have been anticipated, on the Hunterston brooch. To these features of the Manx alphabet, my attention was called by Professor P. A. Munch of Christiania, during the visit of that distinguished Northern scholar to this country in 1849; by whom, indeed, they were for the first time detected, when inspecting a series of casts of the Manx inscriptions in the Museum of the Scottish Antiquaries. In these ᛋ is sometimes used as B, so that the first name on the brooch reads *Malbritha*. From the incidents already narrated relative to the Scandinavian acquirement of possessions on the Scottish mainland, both by conquest and marriage, it cannot be doubted that, in so far as the Celtic race had any literary acquirements, they must have been familiarized both with the Northern language and Runes. It need not, therefore, surprise us to find in the owner of the Hunterston brooch not a Norwegian queen but a Scottish chief of the same name as the Celtic Maormor, Melbrigda Tönn, slain by Sigurd, the Orkney jarl, when he invaded the north of Scotland A.D. 894. The name, indeed, is familiar to the student of early Scottish history, and its first syllable is one of the commonest Celtic prefixes, as in the *Mail*

Pataric on the Iona tomb, and even in the royal name of Malcolm, *Maol Columb*, the servant of Columba, as *Maol Brigda* signifies the servant of St. Bridget. In all cases it is a male prefix, the Gaelic *maol* meaning *bald* as well as *subordinate*, and being undoubtedly employed in its latter acceptation with reference to the tonsure. It is accordingly frequently met with in the names of ecclesiastics, as in the Pictish chronicle, A.D. 965, "*Maelbrigd episcopus pausavit*," and again repeatedly in an early Irish MS. copy of the Gospels, preserved among the Harleian MSS. in the British Museum, —n, 1802; as, for example, at the end of the Gospel of St. John, the colophon, "Or. do Maelbrigte h-Ua Maeluanaig, qui scripsit hunc librum."

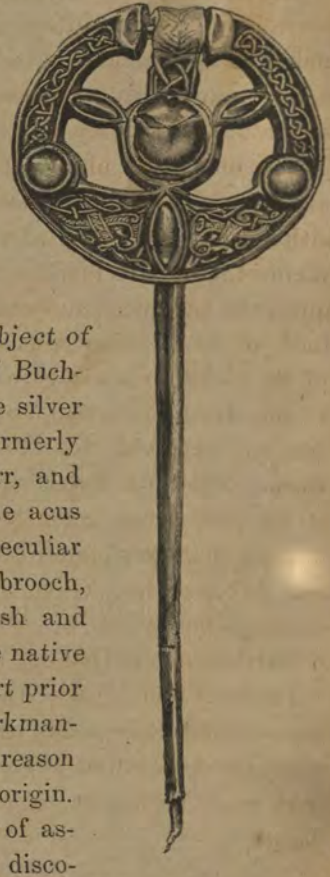
Here, therefore, we have a probable key to the language of the whole inscription, nor can it be regarded as an extravagant idea that a Celt should write his native language in an alphabet already familiar to him. The characters on the brooch, it will be seen, include various *Binderuner* or compound Runes, which add to the difficulty of translation. Making allowance for these, the following version has this merit at least, compared with previous ones, that it does not select merely such letters as will conform to a preconceived theory, but takes the whole in natural order. In the latter part of the inscription the second letter is a compound Rune, consisting of ᛏᚱ, or perhaps of ᛁᛏᚱ, the next of ᚴᛘ, and the fourth of ᛏᚱ—a construction entirely in accordance with the usual mode of interpreting the *Binderuner*, which were in common use at the very period of the most intimate Celtic and Scandinavian intercourse. The whole will thus read:

ᛘᛏᛚᛒᚱᛁᚦᛏ : ᛏ : ᛏᛏᛁᛘᛁᚼᛏᚼ : ᛁ : ᛏᛏᚱᚴ : ᛘᛏᚱᚴᚠᚱᛁᛏᛁ

The additional marks are mostly irregular lines, with no distinctive character, and executed with so little care, that it is not improbable they have been introduced merely to occupy the remaining space with a uniform texture. What is decipherable reads in good Scottish Celtic: *Malbritha a daimiheh i dæol Maolfridi; i.e.*, Malbritha his friend in recompense to Maolfridi: *a* is the possessive pronoun *his*; *daimheach*, a friend or relative; *i* or *h-i*, the old Celtic preposition *in*; and *dìol*, a reward for service done. It must be borne in remembrance that the spelling of the Scottish Gaelic is entirely modern. It is the sound therefore that is chiefly to be looked to, but the variations even in the spelling are not important. No Scandinavian scholar can examine the fac-simile of the inscription, and question the fact

that the concluding portion actually contains the masculine name which Professor Magnusen was at such needless pains to try and educe from that of Malbritha. The chief value, however, to the Scottish antiquary of the reading now given, arises from no identification of these old Celtic friends, but from its establishing the fact—in itself so probable—that they did actually employ the Scoto-Scandinavian Runes in writing their own native language.

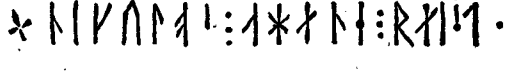
The annexed woodcut represents an exceedingly beautiful Scottish brooch, the size of the original, now in the collection of John Bell, Esq. of Dungannon. Like the Hunterston brooch, it is of silver, set with amber, and with the pattern wrought in gold. The resemblance of the two, both in style of ornament and in some of the details, can hardly fail to be admitted. This very fine specimen was found in the immediate vicinity of the celebrated mounds of Dunipace, Stirlingshire, the subject of antiquarian speculation from the days of Buchanan to our own. Another very fine large silver brooch, jewelled and plated with gold, formerly in the celebrated collection of Major Sirr, and now in that of C. K. Sharpe, Esq., has the acus exactly corresponding in its form and peculiar construction to that of the Hunterston brooch, while its other details are such as Scottish and Irish antiquaries are familiar with on the native gold and silver work of Celtic Christian art prior to the eleventh century. In point of workmanship and style of art, therefore, we have no reason to ascribe to our Runic brooch a foreign origin. Other evidence equally exposes the fallacy of assuming a necessary connexion between the discovery of Runes on our western coast and the fatal expedition of King Haco.



Directly opposite to the Ayrshire coast, and within sight of the Bay of Largs, a small island protects the entrance to Lamlash Bay, in the Isle of Arran, the well-known anchorage where Haco mustered his shattered fleet after his overthrow. In the Norwegian account of the expe-

dition, after the narration of the fatal storm and conflict, it is stated, "The king sailed past Kumbrey (Cumbray) to Melansay, where he lay some nights."[1] This Melans ey, or isle, there can be little doubt is Holy Island, in the Bay of Lamlash, which contains the cave assigned by immemorial tradition as the residence of St. Molio or St. Maoliosa, a disciple of Columba, and a favourite Celtic saint. The island corresponds in geological structure to the southern district of Arran, presenting along the shore the common red sandstone strata, overflowed by a great mass of claystone and claystone porphyry, which towers above it in rugged and picturesque cliffs, fringed by the dwarf oak and birch, to a height of about a thousand feet. The cave of St. Molio is little more than a waterworn recess in the sandstone rock at an elevation of about thirty feet from the present level of the sea. On the shore below, a circular well is pointed out as St. Molio's Bath, and a large block of sandstone cut perfectly flat on the top, and surrounded with a series of artificial recesses or seats, bears the name of the Saint's Chair. Such relics are by no means rare in Scotland. They appear to have been singularly characteristic of Celtic hagiology. The Bath of St. Cuthbert was once a favourite resort in Strathtay; that of St. Woloc exists in Strathdeveron; and that of St. Fillan remains in the strath of Perthshire which still bears his name. St. Kentigern also had once his "bath," "bed," and "chair," near the Molendinar Burn. The Stone Chair of St. Marnan is still at Aberchirder; that of St. Fillan was recently preserved at the Mill of Killin; while another of these singular Celtic relics, placed at a commanding point, near Achtereachan, Glencoe, where a bend of the glen enables it to command both views, bears the name of *Cathair Malvina*, or the Chair of Malvina, one of Ossian's heroines.

The roof and sides of the cave of St. Molio, on Holy Island, are covered with rude marks and inscriptions of many different periods, among which may be discerned the following Runic inscription, cut with great regularity, in characters of about an inch and a half in length.



The reading is sufficiently simple and unmistakable. *Nikulos ahæne raist.* The first, ᚾᛁᚴᚢᛚᚮᛋ, is manifestly a proper name. No such

[1] Haco's Expedition, Rev. J. Johnston, 1782, p. 109.

word as ᛁᚼᚾᛁ is known in the Icelandic or ancient Norse tongue, unless it be simply *a Hane:* of Hane, the name of a place. We may therefore, perhaps, without impropriety, look for it in the native Celtic, where *abhadh*, pronounced very nearly in accordance with the spelling of *ahane*, signifies a hollow or abode. The last word, ᚱᛏᛁᛋᛏᚢ, is of common occurrence in Runic inscriptions, the preterite of *rísta, to engrave.* In the present example, therefore, we shall not probably err in reading the inscription *Nicholas engraved, or cut, this cave.*

According to established custom with all relics found in the neighbourhood of the estuary of the Clyde, possessing the slightest affinity to those of ancient Scandinavia, this Runic inscription will no doubt be ascribed to the followers of King Haco in the thirteenth century. But independently of the improbability of the defeated Norsemen employing themselves in inscribing such a retreat, the simplicity of the Runes favours the probability of its pertaining to an earlier period. It is not altogether impossible, however, that even now, after the lapse of at least six centuries, we may be able from the brief Runes of St. Molio's Cave, to identify the anchorite who dwelt in this rude retreat. From the initial ✠, the inscription appears to be the work of an ecclesiastic; and in the Chronicon Manniæ, after recording the death of Bishop Michael, the elevation of his successor Nicholas, a native of Argyle, is thus noted: Huic successit Nicolaus Archadiensis genere, qui jacet in monasterio Benchorensi.[1] He appears to have succeeded to the see about the year 1193, and to have held it for about fourteen years.[2] The coincidence both of name and place of nativity certainly give probability to the supposition that the recluse of Holy Island in the bay of Lamlash, and the old Manx bishop, may have been one; at the same time it must be observed that such attempts at identification rest on an extremely uncertain basis, and have been the fruitful source of error.

The traces of the use of Runic characters are still abundant in the Isle of Man, and undoubtedly belong to the period of the general adoption of Christianity there, though it is not possible to assign to them a precise date. But the above are not the only Runes inscribed on St. Molio's cave. The whole surrounding surface of the rock is covered with crosses, evidently the marks of pious but illiterate pilgrims, who thus recorded their visit to the Holy Isle. Among these, however, are also traceable initials, monograms, and other more

[1] Chronicon Manniæ, Antiquitates Celto-Normanicæ. Copen. 1786, p. 44. [2] Ibid. pp. 24, 25.

perfect evidences of the former concourse of pilgrims to the sacred spot. The annexed fac-simile of a group of them shews the curious character of these primitive holographs; but among them the experienced eye will at once discern the Runic characters, not regularly

Runic Inscription in St. Molio's Cave.

and boldly cut as in the former inscription, but irregularly scratched, as with the hasty hand of the wayfaring pilgrim. It is hardly necessary now too curiously to investigate the primitive record, though the letters are for the most part sufficiently distinct and well defined. The ᚴ, or *k*, is not a Scandinavian but an Anglo-Saxon Rune: a mixture by no means improbable by a Celtic inscriber. The whole probably imply no more than the proper name *Akiethir*, though it does not present, as in the former case, one familiar to our ears. Possibly like some other Runic inscriptions, it reads from right to left, in which case we should perhaps recognise it as a female name, *Ritheika*.

The rounded Roman characters, from which the medieval church-lettering ultimately sprung, were in use in the North more than a century prior to the era of King Haco, though they had not entirely superseded the Runes. But before this took place the Runic alphabet had been augmented by various new characters, and the *Binderuner*, or compound Runes, were in general use, especially in proper names, many of which are united into a single monogram. Both of the inscriptions in St. Molio's Cave are free from the later abridged mode of writing, and would therefore seem more probably ascribable to an older date than the thirteenth century, or indeed the not greatly earlier era of Bishop Nicholas of Man.

In this conclusion Scandinavian scholars will probably concur, though they may perhaps detect in other undecipherable groups of markings on the same cave the characteristic *Binderuner* of a later date. It can hardly be expected that they will unhesitatingly concur in another idea, advanced I believe for the first time, that the Celtic population

of Scotland were as familiar with the Northern Runes as the natives of the kingdom of Northumbria are proved to have been with the Anglo-Saxon Runes, in which the most remarkable Scottish Runic monument—the Cross of Ruthwell—is inscribed. Of this, however, we are not entirely without some direct indications. The earliest, if not indeed the only medieval Scottish document which contains any allusion to the Pictish race, is a charter of confirmation of the lands of Burgie, in the reign of Alexander II., which occurs in the Chartulary of Moray. In describing the marches of the lands of Burgie, as fixed by perambulation, it refers to the various landmarks as follows: "Scilicet a magna quercu in Malevin quam predictus comes Malcolumo primo fecit cruce signari usque ad *Rune Pictorum*, et inde usque ad *Tubernacrumkel*, et inde per sicum usque ad *Tubernafein*, et inde usque ad *Runetwethel*, et inde per rivulam qui currit per meresiam usque ad vadum quod dicitur *Blakeford*, quod est inter Burgyn et Ulern."[1] To this interesting and curious charter another parchment is attached, which professes to furnish an explanation of the local names. They contain, it will be observed, an admixture of Celtic and Saxon terminology, sufficiently characteristic of the previous history of the locality; and the explanatory parchment is chiefly valuable as shewing how effectually the intrusion of the later race had adulterated or effaced the native traditions. The following is the explanatory translation:—"*Rune*[*s*] *Pictorum*, the carne of the Pethis, or the Pecht's fieldis. *Tubernacrumkel*, ane well with ane thrawine mowth, or ane cassin well, or ane erwik in it." It is sufficiently obvious that the explanations are given with uncertainty and doubt, and there can be little hesitation in translating the first name, not as the Pictish fields, but as the Pictish Runes, referring, as may be assumed, to an inscribed Celtic monument which had of old marked one of the Burgie marches; though in the reign of Alexander II., and long prior to the Battle of Largs, the very meaning of the term had been forgotten in Scotland. No attempt is made in the Burgie parchment to explain the name *Runetwethel*, but its correspondence to that of Ruthwell, the site of the celebrated Runic monument in Dumfriesshire, is perhaps not unworthy of notice.[2] The

[1] Regist. Episc. Moraviensis, p. 456.

[2] It is not impossible that the latter name may have originally referred to the Runes on its beautiful monument. The probability, however, is lessened by the earlier forms of the name, as *Ryval* and *Ruthwald*. The reader of chartularies cannot have overlooked the endless variations of local names.

form of the northern Runes, as of the eastern Cuneatic characters, is manifestly traceable to a people whose literature was confined to graven records, chiefly on stone. Many of the medieval mason's marks are not only similar in general form, but some of them are identical with the following characters of the Runic alphabets:— ᚺᚢᛟᚺᚠᛖᛞᛉᚷᚺᛦ. While this correspondence may be sufficiently explained by the simplicity of such combinations of lines, and their ready execution by the mason's *pen*, the absence of rounded forms, such as predominate in the Roman alphabet, adds another proof that the origin of medieval architecture, and perhaps also of Free Masonry, is traceable to the northern countries of Europe. The medieval mason's marks may undoubtedly be assumed with equal probability to retain the traces of the obsolete Runes, as the *Bomærker* (literally house-marks) employed by the peasantry in certain districts of Sweden and Norway as signatures, or marks on personal property, in which the northern antiquaries recognise surviving elements of the Runic alphabet. In more recent times the term *Runic* has been used in this country in the vaguest and most uncertain fashion, occasionally without any very definite meaning appearing to be attached to it, and not infrequently as synonymous with Danish or Scandinavian.

These indications of the use of Runes by the native Celtic population of Scotland, are—like many other ideas advanced in this elementary treatise on our national antiquities—offered suggestively, and liable to the correction which further discoveries may suggest. The Celtic character of the name on the Hunterston brooch, the equally familiar one, in its Greek form, of that in the cave of St. Molio—peculiarly characteristic of the native Christian ascetics prior to the eleventh century,—and the Runic characters mingling with the initials and pilgrims' marks of the Holy Isle, are all suggestive of the same idea; and this it will be seen receives further confirmation from other Runic inscriptions. But whatever conclusion be finally adopted as to the precise rendering of the Hunterston inscription, or the inferences to be drawn from the various Runic memorials found in Scotland, it will be universally acknowledged that the brooch on which the former occurs is a relic of no ordinary interest or value. Though it may not admit of comparison with the celebrated golden horns, it surpasses, I believe, any other inscribed Runic relic hitherto discovered in Denmark or Sweden. A gold head ring found a few

years since at Starup, in the neighbourhood of Haderslev, with Runic letters upon it, is engraved in Mr. Worsaae's Primeval Antiquities of Denmark. The inscription is simply the word *lvþro*, traced on the inner side of the ring, and assumed as probably denoting the name of the owner, which in this case also is supposed to be that of a man.[1]

While the Isle of Man still retains many interesting traces of Scandinavian influence, in its memorial crosses graven with inscriptions in the Northern Runes, it is surprising how very partial are the indications of the same influence in the older northern jarldom. Only two imperfect Runic inscriptions have been observed in Shetland, and are described by Dr. Hibbert from drawings by Mr. Low.[2] One of them on a slab or grave-stone at Crosskirk, in Northmavine, is too much mutilated to render any attempt at restoration or decipherment of its meaning possible. The other was fixed in the wall of the Parish Church of Sandness, where it probably still remains; but, if there be no error in Dr. Hibbert's engraving of it, it only adds another to the frequent examples in Scotland of the term *Runic* being applied to designate any strange or incomprehensible device on a sepulchral monument. In Orkney no Runic monument is known to exist, though it cannot be doubted that many such must have been erected during the earlier years of the independent occupation of the Northern Islands by the Norwegian Jarls. Some of these, it is not impossible, may even yet be brought to light; though the continuous presence of a busy population during the intervening centuries affords too satisfactory means of accounting for their destruction to render such discoveries very probable at this late date. The annexed illustration of a later and more complicated Runic inscription than any known British example, is the remarkable memorial stone found in 1824 on the Island of Kingiktorsoak, Greenland, under the parallel of 73°, proving the zeal with which the old Scandinavian colonists pushed their adventurous course even to the extreme north of the inhospitable region of Greenland. It is introduced here chiefly to shew the complicated and much more intricate character of Scandinavian inscriptions of a later and well ascertained period; the era of the colonisation of Greenland being sufficiently established as a historical fact. Mr. C. C. Rafn finds in the concluding Runes the date 1135. During the recent repairs executed on St. Magnus Cathedral at Kirkwall, some singularly interesting dis-

[1] Primeval Antiquities of Denmark, p. 55.

[2] Hibbert's Shetland, pp. 531, 547.

coveries were made connected with the period of its earliest Scandinavian bishops. A tomb was opened accidentally in the choir of the cathedral, which from the inscription accompanying it appears to

Greenland Runic Inscription.

have been the place to which the remains of William, according to Torfæus, first resident Bishop of Orkney, were translated, after the elongation of the cathedral, towards the close of the twelfth century. Along with the bones were interred a leaden plate inscribed in the common Church letters of the period:—℟. Requiescit. Williamus. Senex. felicis. memorie. On the reverse of the plate are the words, pmus epis. Further excavations in the east end of the choir, and close to the presumed site of the high altar, led to the discovery of two curious pieces of sculpture, in bas relief, representing St. Olaf and St. Magnus. These, however, as well as the tomb of Bishop Tulloch, with crosier, paten, and chalice inclosed, and other discoveries made at the same period, belong to a later era than that of Runic literature, and are only referred to now as suggesting the possibility of still earlier relics of the Scandinavian period of Orcadian history being yet brought to light, while the first of them shews that the Runic character had fallen into disuse soon after the introduction of Christianity in the north.

It is to the Manx monuments, however, that we must turn for the most distinct and abundant traces of Scandinavian influence, though modified both by the arts and the faith of the older Celtic population. The Runic inscriptions are conjoined with the sacred emblem of the Christian faith, and are associated with ornamental accompaniments, some of which are sufficiently common on the sculptured memorials of the Scottish mainland and isles, though never found on contemporary native monuments of Scandinavia. The close resemblance of a peculiar trefoil ornament on the upper part of one of these crosses at Kirk Michael, to the device on the reverse of the coins of Aulaf,

King of Northumbria, has been pointed out;[1] but it is impossible to limit to a single country or to a very narrow period much of the common ornamentation vulgarly called Runic knot-work. It may be traced on manuscripts, monuments, and relics of Scoto-Irish, Pictish, Scandinavian, Anglo-Saxon, and Norman origin, from the sixth to the twelfth century. It is, however, frequently found with other accompaniments of a more precise character, and this in the case of the Manx crosses of Kirk Andreas and Kirk Michael, approaches more nearly to the style of the singular sculptured standing stones of Scotland than to any other monuments of the north of Europe. Here, therefore, sheltered by the isolation of this island, and by the veneration or by the superstition of its inhabitants, examples have been preserved of the style of Scoto-Norwegian monuments of the eleventh and twelfth centuries, which must once have abounded in the Scottish Northern and Western Isles, and on those parts of the mainland longest subject to Scandinavian rule. "The fear of sacrilege evinced by the Manx peasants is very great. The ruined chapels are still venerated, and a Manx formula of cursing is,—May a stone of the church be found in a corner of your house."[2] That the monuments of this period should have disappeared cannot surprise us, when we reflect on the very few memorials we now possess of that important era of Scottish ecclesiastical history which intervenes between the building of the white-walled cathedral of St. Ninian at Whithern, about the year 412, and the founding of the Abbey of Dunfermline in the eleventh century. I am fortunate in having obtained the assistance of Professor P. A. Munch—whose name will, I believe, be sufficient authority among northern scholars—in translating such of the Manx monuments as are referred to here. Previous transcriptions made by copyists unfamiliar with the Runic characters, or ignorant of the language in which they are inscribed, have added much uncertainty and obscurity to the subject, and produced so many various readings as to bring the whole inquiry into disrepute.[3]

At Kirk Andreas, near Ramsey, at Kirk Michael, Kirk Bride, Kirk Maughold, and Balsalla, are various of these interesting memorials of

[1] Journal of Archæol. Asso. vol. i. p. 48.

[2] Ecclesiastical Notes of the Isle of Man, &c., p. 46.

[3] Camden's Britannia; Gibson's Ed. p. 1458; Gough's Ed. vol. iv. p. 510; Archæol. Scot. vol. ii. pp. 490, 505; Archæol. Journal, vol. ii. p. 75; Ecclesiol. Notes, p. 24, &c.

the Scandinavian era, supplying us with examples of the art and evidences of the faith of the period, and even furnishing some curious personal information regarding the men of that time. Not the least interesting of these minute records is that supplied by the inscription on one of the Kirk Michael crosses, already referred to:—

ᛘᛅᛁᛚ : ᚨᚱᛁᚴᛏᛁ : ᛟᚢᚾᚱ : ᚼᚦᛅᚴᛅᚾᛟ : ᛟᛘᛁᚦ : ᚱᛅᛁᛟᛏᛁ : ᚴᚱᚢᛟ : ᚦᛅᚾᚼ : ᚠᚢᚱ : ᛟᛅᛚᚢ : ᛟᛁᚾᛁ : ᛟᛁᚾ : ᚨᚱᚢᚴᚢᛁᚾ : ᚴᛅᚢᛏ[ᛋ] : ᚴᛁᚱᚦᛁ : ᚦᛅᚾᚼ : ᛅᚢᚴ : ᛅᛚᛅ : ᛁᛘᛅᚢᚾ

Rendered literally, according to the equivalent for each Runic character, it is:—Mail orikti sunr aþakans smiþ raisti krus þana fur salu sini sin oruguin gauts girþi þana auk ala i maun. And in pure Norse it reads:—Mailorikti (Mailbrigdi) sunr Aþakans smiđar reisti kross þenna fyrir sálu sinni sins öruggs vinar Gauts's gerđi þenna ok alla i Mön; *i.e.*, Mailbrikti, son of Athacan the smith, raised this cross for his soul, and that of his faithful friend Gaut, who made this [cross] and all [the crosses] in Man. The name of the faithful Gaut, the old Manx sculptor, occurs on other inscriptions, as on a mutilated fragment at Kirk Andreas:—

ᚦᚼᚾᛅ : ᚢᚠ : ᚢᚠᛅᛁᚴ : ᚠᛅᚢᚦᚢᚱ : ᛟᛁᚾ : ᛁᚾ : ᚴᛅᚢᛏᚱ : ᚴᛁᚱᚦᛁ : ᛟᚢᚾᚱ : [ᛒᛁᛅ]ᚱᚾᛅ ᚱ : ᚴ : : :

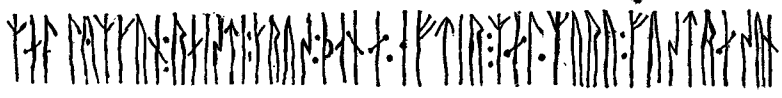
Literally, þana uf ufaig fauþur sin in gautr girthi sunr . . . rnar g . . . orthog. (N. N. reisti kross) þenna of Ufeig föđur sinn, en Gautr gerđi, sunr Bjarnar g . . . . . N. N. raised this cross over Ufeig his father, *but Gaut* made [it] the son of Björn . . . . Another of the Kirk Michael crosses, which has been more frequently and diversely translated than any British Runic inscription, consists of an upright square slab, with a cross cut on both sides, according to the usual style of the Scottish memorial stones, and decorated with a variety of sculptured figures and animals, representing a stag hunt. One of the edges is ornamented with interlaced work, as shewn in the annexed illustration, and along the opposite edge is the legend, surmounted with a small incised figure of a warrior in simple costume, with his arms extended, holding a spear in his right hand, and bearing a round shield on the left arm. The letters are sharply cut, and the author of "Ecclesiological Notes on the Isle of Man" refers to this as the most perfect Runic inscription in the three kingdoms:—

ᛅᚢᛅᛚᚠᛁᚱ : ᛋᚢᚾᚱ : ᚦᚢᚱᚢᛚᚠᛋ : ᚼᛁᚾᛋ : ᚱᛅᚢᚦᛅ : ᚱᛁᛋᛏᛁ : ᚴᚱᚢᛋ :
ᚦᚬᚾᚬ : ᛅᚠᛏ : ᚠᚱᛁᚦᚢ : ᛘᚢᚦᚢᚱ : ᛋᛁᚾᚬ

Its literal rendering is:—Auolfir sunr þurulfs hins rauþa risti krus þana aft friþu muþur sina; betraying like the others the variations of a provincial dialect, or a foreign use of the old Norse tongue. More correctly it is:—Eyolfr sunr þórolfs hins rauđa reisti kross þenna eft Friđu móđur sína; *i.e.*, Eyolf, the son of Thorolf the Red, raised this cross after (or in memory of) Frida his mother. This exceedingly simple memorial of affection, contrasting in its brevity so strikingly with the inflated extravagancies of modern monumental inscriptions, affords a good example of the most usual style of the Manx Runic legends. One cross at Kirk Andreas is raised by Sandulfr suarte, or Sandulf the Black, in memory of his sons and wife; while on another imperfect fragment of a cross may still be traced the words:—Oskitil uilti i trigu aiþsuara sinn; *i.e.*, Oskitil betrayed in truce his sworn friend. The precise object of this unusual memorial cannot now be guessed at with any degree of certainty, though the fragment preserves sufficient that is peculiar to excite our regret at its recovery in so imperfect and dubious a state. Another mutilated cross at Kirk Michael is interesting as an additional example of a Runic inscription containing names essentially Celtic in character. Part of the inscription is so much defaced by the weather as to baffle any attempt at a consistent rendering of its meaning, but of the portion copied below no doubt can be entertained. It is presented here in fac-simile, as an illustration of the style of engraving of the Manx inscriptions, though it

Kirk Michael Cross

differs in the use of ᛋ ᛏ for the more common Runic characters introduced on the other crosses as equivalent to the *s* and *t*.

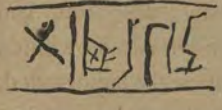


The inscription literally reads:—Mal-lymkun raisti krus thana eftir Mal-muru fustra sun; *i.e.*, Mallymcun raised this cross, after Malmor his foster-son. The frequent allusions in Runic inscriptions to the foster-father, brother, or son, shews the singular estimation in which such peculiar ties of adopted relationship were held by the northern races at that early date, as they have continued to be even to our own day among the Scottish Highlanders. But the most thoroughly Scandinavian in character of all the Manx Runic crosses is the beautiful one which stands in the churchyard at Kirk Braddan. I am not aware if crosses of this form are found in Denmark or Norway, but in nearly all the principal details, especially on the shaft, it differs entirely from the other Manx crosses, and corresponds to those on Scandinavian relics of the Iron Period. It has been broken in two, and otherwise mutilated; but the two principal pieces have been clasped together with iron bands, so that a good idea can still be formed of it in its perfect state. The shaft is decorated with the common dragon ornaments, intricately intertwined over its whole surface; thus greatly differing in style from the Runic crosses wrought by the skilful hands of Gaut, as well as from the contemporary standing stones of the Scottish mainland. This, therefore, we may be justified in assuming, is the work of some Norwegian artist, whose style was derived from his own fatherland, though in some degree modified by the favourite models of Celtic art which have influenced the form of other Christian monuments in the island. It is probably one of the latest of all the Runic memorials in Man, while at the same time it presents the Scandinavian characters accompanying a style of art to some extent derived from the same foreign source. It can hardly indeed admit of doubt, that in some at least of the Manx monuments we must recognise the adaptation of the Norse literature and dialect to native memorials. The cross cut in relief on the flat slab, with the subordinate accompaniments illustrative of feats of war or the chase, appear to be peculiarly characteristic of primitive Pictish art; while the perforated head with interlaced ornamentation, such as that which is here associated with the old dragon pattern

and other Pagan devices of Scandinavia, is more directly traceable to the early Christian arts of Celtic Ireland. The Society of Antiquaries of Scotland possesses a complete cast of this beautiful cross, taken when the iron clamps were removed for the purpose of being renewed, and which thus supplies a portion of the Runic inscription which can no longer be seen. It is as follows:—

ᚦᚢᚱᛚᛁᚢᚱ : ᚾᛅᚴᛁ : ᚱᛁᛋᛏᛁ : ᚴᚱᚢᛋ : ᚦᚬᚾᛅ : ᛅᚠᛏ : ᚠᛁᛅᚴ : ᛋᚢᚾ : [ᛋ]ᛁᚾ : [ᛒ]ᚱᚢᚦᚢᚱ : ᛋᚢᚾ : ᛅᚢᚱᛋ

Literally,—þurlior neaki risti krus þana aft fiak sun sin bruþur sun eaors. Orthogr.: Thorliótr neaki reisti kross þenna eft Fiak sun sinn, bródurson Eaors; *i.e.*, Thorlior Neaki raised this cross after Fiak his son, the nephew (brother's son) of Eaor. In addition to this the following marks occur on the under side of the head of the cross, and have been variously figured in the different editions of Camden, and elsewhere. The Runic ᚾ appears to be used in its literal sense, and the remainder may be assumed as rude attempts at Roman characters, in which case I think there can be little hesitation in reading it as the sacred name IHESVS—a curious example of the transition from the use of Runes to Roman characters.



Kirk Braddan Cross.

It has already been noted that the term Runic is used in Scotland in the vaguest sense, being frequently understood as synonymous with Scandinavian. In the account of St. Madoes' Parish, Perthshire, for example, we read: "In the churchyard there is a very beautiful specimen of that class of monuments called Runic, from their imagined Norse or Danish origin." It may be perhaps assumed that another stone in the parish of Anwoth, Kirkcudbrightshire, has no

better claims to rank among the Runic monuments of Scotland, notwithstanding that the older Statist applies the name in reference to its inscription. It is thus described in the Old Statistical Account of the parish, along with a large moat which occupies a steep rocky peninsula jutting out into the sea: "Near to this moat stands a thin stone, nearly perpendicular, five feet three inches high, engraved on both sides with the rude figure of a cross, accompanied with several ornamental strokes, which some antiquaries suppose to be Runic inscriptions."[1] But one other remarkable Runic monument remains to be considered, surpassing in extent and importance any of those yet described, and rendered not the less interesting from the very curious literary controversy to which it has given rise. This is the celebrated cross of Ruthwell, in Dumfriesshire, inscribed not in Northern but Anglo-Saxon Runes. Like the few English examples yet discovered, it is in the Northumbrian dialect of Anglo-Saxon, and therefore is traceable, not to that northern intrusion of the Scandinavian branch of the Teutonic races which we have hitherto considered, and by which the old Celtic race of Scotland has been so greatly modified, but to the influx of a Teutonic race from the south, by which the Celtic occupants of the Scottish Lowlands and the whole Northumbrian kingdom, were ultimately superseded. Nevertheless the cross of Ruthwell may be referred to here without any great risk of confusion, along with those inscribed in the old Norse dialect; notwithstanding the justice of Mr. J. M. Kemble's remarks, that "the characters of the Norwegians, Swedes, Danes, and Icelanders, are not less distinct from those of the Goths, High and Low Germans, and Anglo-Saxons, than the languages of the several nations which they represented."[2] The Ruthwell cross is unquestionably by far the most important Runic monument in Britain, and has excited an attention fully equal to the great interest justly pertaining to it. A beautiful engraving of this ancient monument in the fourth volume of the Archæologia Scotica, accompanied with careful fac-similes of its inscriptions, renders any minute description of it superfluous.

Setting aside certain old and sufficiently vague local traditions recorded in the first Statistical Account of the Parish of Ruthwell, we obtain the earliest authentic notice of it only in the seventeenth

[1] Sinclair's Statistical Account, vol. xiii. p. 350. A local correspondent informs me that the inscription is now quite illegible.

[2] Archæologia, vol. xxviii. p. 327.

century, at which time it appears to have still remained in the parish church, uninjured by any of those earlier ebullitions of misdirected popular zeal to which so many Scottish relics of Christian art fell a prey. When, however, the struggle between Charles I. and his people was rapidly hastening to a crisis, and religious differences were forced by many concurrent influences into violent collision, the General Assembly of the Presbyterian Church of Scotland, which met at St. Andrews in the month of July 1642, passed an order decreeing the demolition of the Ruthwell cross as a monument of idolatry. The order met with a less hearty and thorough-going execution than might have been anticipated from the spirit prevailing at a period when the whole course of public events had tended to inflame men's minds to the uttermost. The column, however, was thrown down and broken in several pieces; but it still lay in the church, and was examined there by Pennant so recently as 1772. Soon after this, however, it was cast out into the churchyard, where its exposure to weather, and its liability to careless and wanton mutilation, threatened at length most effectually to accomplish the object of the St. Andrews Assembly's Order of 1642, when fortunately the Rev. Dr. Duncan was presented to the parish. Soon afterwards he had the fragments of the venerable memorial pieced together, and re-erected within the friendly shelter of the manse garden,—a monument to his own good taste, with which his name will be associated by thousands who know not the large-hearted benevolence and piety with which he adorned the sacred office which he filled.

Not content, however, with merely restoring the venerable memorial, Dr. Duncan executed careful drawings of it, from which the engravings in the fourth volume of the Archæologia Scotica were made. These are accompanied with a history from his pen, and an accurate translation of the Latin inscription, which is cut in Roman characters on the back and front of the cross. With the Runic inscription, which occupies the remaining sides of the monument, Dr. Duncan attempted no more than to furnish the Scottish antiquaries with an accurate copy, leaving those who deemed themselves able for the task to encounter its difficulties, and render an intelligible version of its meaning. This was accordingly undertaken by Mr. Thorleif G. Repp, a learned northern scholar, and a native of Iceland, then resident in Edinburgh, who, reading the letters correctly enough, proceeded to weave them into imaginary words and sentences, by means

of which he makes out the inscription to record "a gift for the expiation of an injury, of a *cristpason* or baptismal fount, of eleven pounds weight, made by the authority of the Therfusian fathers, for the devastation of the fields." Other portions of the inscription were made to supply the name of the devastated locality, "The dale of Ashlafr," a place as little heard of before as were its holy conservators, the Monks of Therfuse! Dr. Duncan remarks, in furnishing an abstract of Mr. Repp's rendering of the Ruthwell Runes,—"It is obvious that, in future inquiries on this subject, it will be of considerable importance to fix the locality of *Ashlafardhal* and *Therfuse!*" The accurate drawings of Dr. Duncan, however, published as they were to the learned world by the Scottish Antiquaries, had at length supplied the most important desiderata towards the elucidation of the old Anglo-Saxon memorial. Professor Finn Magnusen was the first to avail himself of the new elements for the satisfactory investigation of this venerable Teutonic relic, and published, in Danish, in the "Annaler for Nordisk Oldkyndighed og Historie, 1836-37," and nearly at the same time in English, in the "Report addressed by the Royal Society of Northern Antiquaries to its British and American Members," a revised version of the Ruthwell inscription, in which, while confirming the somewhat startling opinion of Mr. Repp, that it was in a language consisting both of Anglo-Saxon and old Northern words, he arrives at very different, but still more precise conclusions. The learned Dane, however, had obtained, as he conceived, a source of information which not even the zealous incumbent of Ruthwell parish had access to.

"Fortunately," says he, "we are in possession of what must be admitted to be an important document in the case before us, a document the existence of which was unknown as well to Mr. Repp as, to the best of our belief, to all others now living, that have devoted attention to the monument in question. Dr. Duncan observes that the capital of the column, which in the delineations he gives of it shews no characters or traces of such, had, however, formerly inscriptions, now quite illegible. The greater part of them, meanwhile, are found on a delineation of the two broader sides of the said capital, which together with the two Runic sides of the whole column, (consequently more of it than has been given by Hickes or Gordon,) is to be seen on a large folio copperplate engraving, now the property of me, Finn Magnusen. It was given to me some years ago by my much-lamented friend and predecessor, Professor Thorkelin, who, however, his memory being impaired by age, could not remember anything more about it than that it represented a column in Scotland, and that he had obtained it, he knew not how or of whom, during his travels in Britain."[1]

[1] Report of R. S. of Northern Antiquaries to Brit. and Amer. Mems., 1836, pp. 88, 89.

This rare and indeed seemingly unique print Professor Magnusen accordingly designates the "Thorkelin Engraving." Its age he conceives must be about 150 years, or perhaps still older. "Be this as it may," he adds, "it serves to throw a new and most important light —in fact, the most important yet obtained—on the design and purpose of the column, inasmuch as it has preserved the initial words of its inscription, setting forth that one *Ofa*, a descendant of Voda, had caused it to be cut," &c. Accordingly, setting aside the humbler attempts of Mr. Repp, the Danish professor substitutes a *marriage* for the *devastation* of his predecessor, discovers four important historical personages in the record, nearly fixes the precise year A.D. 650 for the handfasting, and altogether furnishes an entirely new chapter of Anglo-Saxon history, based almost entirely on this Thorkelin print! Some able northern scholars, more familiar with Anglo-Saxon literature than Professor Magnusen, adopted the very summary process of dealing with the new element thus unexpectedly brought to bear on the inquiry, by doubting the authenticity, if not even the existence, of this unique print. Of its existence, however, there can be no doubt, since, instead of being the rarity which Professor Magnusen imagined, it is to be found in every archæological library in the kingdom, being none other (as I think will no longer be doubted) than one of two etchings, executed by the well-known Scottish antiquary, Mr. Adam de Cardonnel, and forming *Plates* LIV. and LV. of the Vetusta Monumenta, vol. ii., published in 1789. These are accompanied by a description furnished by R. G., (Roger Gale,) and to it the following postscript has subsequently been added, which it will be seen supplies the account Professor Magnusen failed to obtain from his aged friend: "Since this account was read before the Society [of Antiquaries of London,] the drawing has been shewn to Mr. Professor Thorkelin, who has been investigating all such monuments of his countrymen in this kingdom, but he has not returned any opinion." These engravings of the Ruthwell inscription appear to have excited little interest, probably on account of their being accompanied by no critical analysis or attempt at translation. They would seem to have escaped the notice of Mr. J. M. Kemble, otherwise he would have found there all that the drawings of Dr. Duncan supply, with, indeed, some slight additions; for it chances oddly enough that the old Scottish Antiquary has copied the Anglo-Saxon Runes—about which it may reasonably be doubted if he knew anything—a great deal

more correctly than the Latin inscription in familjar Roman characters, some of which he has contrived to render totally unintelligible. It was probably a result of this carelessness, that in arranging a broken fragment of the top of the cross, along with the lower stem, he misplaced the parts, wedding the imperfect upper fragments of the Latin, to the remainder of the Anglo-Saxon inscription. The offspring of this misalliance was the *Ofa, Voden's kinsman*, of Professor Magnusen, whose double genealogy is given with amusing precision, "according to the Younger Edda!" The slightest glance at Cardonnel's etchings will shew that the learned Dane, in attempting to decipher this supposed invaluable addition, was only torturing ill-copied Roman characters into convenient Northern or Anglo-Saxon Runes.

In 1838, Mr. John M. Kemble, an English Anglo-Saxon scholar, undertook to unwind this ravelled skein, and in an able paper "On Anglo-Saxon Runes,"[1] pointed out the valuelessness of any amount of knowledge of the Scandinavian languages as a means for deciphering Anglo-Saxon inscriptions. Following out his own views he accordingly produced a translation differing, *toto cœlo*, from either of those already referred to, but which commends itself in some degree even to the mere English student, who detects in the old Anglo-Saxon the radicals of his native tongue; as in the original of Mr. Repp's *Cristpason*:—KRIST WAES ON RODI,—*Christ was on the Rood or Cross.* Combating with the difficulties arising solely from the mutilated and fragmentary state of what Mr. Kemble so justly styles "this noble monument of Anglo-Saxon antiquity," he demonstrates the rhythmic character of the construction, deducing from this the strongest proof of the accuracy of his reading. Still should the reader, who is thus compelled to consider two learned versions of this inscription as no better than the Antiquary's *Agricola dicavit libens lubens*, hesitate about accepting the third as less open to challenge, his scepticism could not perhaps be greatly blamed. A remarkable chance, however, threw in the way of the intelligent Anglo-Saxon scholar an altogether indisputable confirmation of the general accuracy of the conclusions he had arrived at. A comparison of the various steps in this process of elucidation furnishes one of the most singular modern contributions to the curiosities of literature. A few years ago a MS. volume consisting chiefly of Anglo-Saxon homilies, was discovered at Vercelli, in the Milanese, but which also contained, intermingled with the prose,

[1] Archæologia, vol. xxviii. p. 327.

some Anglo-Saxon religious poems. One of these, entitled a "Dream of the Holy Rood," extends to 310 lines, and in this are found the whole of the fragmentary lines previously translated by Mr. Kemble, along with the context which fills up the numerous lacunæ of the time-worn inscription on the Ruthwell cross. No confirmation of the accuracy of conclusions previously published could well be more gratifying or satisfactory than this; independently of which the beauty of the Anglo-Saxon poem suffices to convey a singularly vivid idea of the civilisation existing at the period—probably not later than the ninth century—when it was engraved on the venerable Scottish monument which has anew excited the veneration of the modern descendants of its old Anglo-Saxon builders, and, with some portion of its former beauty renewed by the piety of modern hands, is restored to the occupation of its ancient site. Of the high civilisation of this period, however, the student of Anglo-Saxon history can need no new proof when he bears in mind, as Mr. Kemble has remarked, "that before the close of the eighth century Northumberland was more advanced in civilisation than any other portion of Teutonic Europe."

The "Dream of the Holy Rood" represents the sleeping Christian suddenly startled by the vision of the Cross, the instrument of man's salvation, which appears in the sky attended with angels, and manifesting, by various changes, its sympathy in the passion and the glory of the Redeemer. At length the Cross itself addresses the sleeper, and describes its feelings on being made the instrument of the suffering of the Son of God. It is from this beautiful part of the poem that the verses have been selected for inscription on the Ruthwell cross. The following extracts, in which the fragments still legible on the old monument are printed in italics, will help the reader to form some idea of the refinement of the period when the cross was erected, and may also suffice to shew how little need there is to seek in Scandinavian, or other foreign sources, for the taste or skill manifested in the works of early native art. The Cross thus speaks in person:—

'Twas many a year ago,
I yet remember it,
That I was hewn down
At the wood's end,
Stirred from out my dream.
Strong foes took me there,
They made me for a spectacle,
They bade me uplift their outcasts:
There men bore me upon their shoulders
until they set me down upon a hill,
There foes enough fastened me.
There saw I the Lord of mankind
hasten with mighty power,
because he would mount on me.
There then I dared not,
against the Lord's command,
bow down or burst asunder;
There I saw tremble

the extent of the earth.
I had power all
his foes to fell,
but yet I stood fast.
Then the young hero prepared himself,
That was Almighty God,
Strong and firm of mood
he mounted the lofty cross,
courageously in sight of many,
when he willed to redeem mankind.
I trembled when the hero embraced me,
yet dared I not bow down to earth,
fall to the bosom of the ground,
but I was compelled to stand fast.
A cross was I reared.
I raised the powerful king,
the lord of the heavens;
I dared not fall down.
They pierced me with dark nails,
on me are the wounds visible!
* * *
They reviled us both together.
I was all stained with blood
poured from the man's side.
* * *
The shadow went forth,
wan under the welkin:
All creation wept;
they mourned the fall of their king.
Christ was on the cross,
yet thither hastening,
men came from afar
unto the noble one.
All that beheld I,
With sorrow I was overwhelmed.
* * *
The warriors left me there
Standing defiled with gore;
I was all wounded with shafts.
They laid him down limb-weary,
They stood at the corpse's head;
They beheld the Lord of heaven,
and he rested himself there awhile,
weary after his mighty contest.

This curious poem is marked by what Mr. Kemble has pronounced to betray evidence of modern handling, and is perhaps the amplification by a later Anglo-Saxon poet,—it may be of the simpler address originally graven on the Ruthwell cross. Of the general identity between the poem and the inscription, however, not the slightest doubt can exist; and we therefore no longer depend on any future discovery for supplying the deficiencies of the Runic legend, though we can only guess as to the full extent to which it was carried in its original form. "It always seemed probable," says Mr. Kemble in concluding his observations on the old Scottish monument, "that much of the inscription was missing, and the comparison instituted above renders this certain. The passages which remain are too fragmentary ever to have constituted a substantive whole, without very considerable additions, which there is no longer room for upon the cross in its present form. Buried perhaps beneath the soil of the churchyard, or worked into the walls of neighbouring habitations, the supplementary fragments may yet be reserved for a late resurrection. Should they ever again meet the eyes of men they will add little to our knowledge; still we should rejoice to find them once again resuming their old place in the pillar, and helping to reconstruct in its original form the most beautiful as well as the most interesting relic of Teutonic antiquity."[1]

[1] Archæologia, vol. xxx. p. 38.

It would be vain to speculate now on the probability of the former existence of such monuments in other localities, when it is considered that in the great majority of cases scarcely a relic remains even of the ancient parish churches of Scotland, built after the final establishment of a Saxon population in the low country. One other Runic monument, however, is known to have existed in the same district down to a very recent period. Mr. Charles Kirkpatrick Sharp of Hoddam, informs me that in the ancient church of Hoddam, a sculptured stone, which was built into the wall, bore an inscription of some length, in Runic characters. Of this he made a copy before the final demolition of the ruined church in 1815, but he has since sought for the transcript in vain. The original, it is to be feared, no longer exists; but among various sculptured fragments rescued from the ruins, and now in Mr. Sharp's collection, are portions of the shaft of a cross, divided into compartments with sculptured figures in relief, bearing a very considerable resemblance to the style of decoration on the Ruthwell cross, with the addition in one compartment of the favourite interlaced knotwork of Scottish and Irish sculptors. That the venerable ecclesiastical edifice included in its masonry relics of still earlier date, has already been shewn by the rescue of a Roman altar from its ruined walls, dedicated by a cohort of German auxiliaries to imperial Jove.[1]

Other remarkable Anglo-Saxon memorials have been discovered within the ancient kingdom of Northumbria, as well as beyond its southern limits. One of the most interesting of these is a square font, at Bridekirk, in Cumberland. It is covered on each of its four sides with singular sculptures, in some of which a resemblance may be traced to the decorations of the Scottish standing stones. On the east side a curious group represents the baptism of our Saviour, who stands in a square font with a nimbus encircling his head, and over him is the dove perched on a tree. On the south side is a Runic inscription interwoven among ornaments, which still remains to be satisfactorily explained.[2] Mr. Rolfe of Sandwick has in his possession the silver hilt of a sword found in an Anglo-Saxon barrow, and inscribed in Runic characters.[3] A few other examples of the use of the Anglo-Saxon Runes in England have been discovered from time to time,[4] and receive the attention justly due to objects of such high

[1] *Ante*, p. 400.

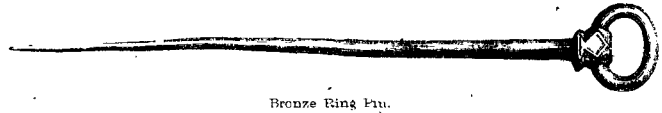
[2] Archæologia, vol. ii. p. 131, Plate ix; vol. xiv. p. 113; vol. xix. p. 379.

[3] Archæologia, vol. xxxii. p. 321.

[4] Archæologia, vol. xxviii. p. 346.

interest, now that English archæologists have learned that it is to themselves and not to Scandinavian scholars that they must look for the elucidation of the literature of their own Anglo-Saxon progenitors.

In the Orkney and Shetland Islands, which were so long occupied as a Norse jarldom, the relics of Scandinavian art are, as might be expected, more abundant than in any other part of the country.



Bronze Ring Pin.

The woodcut represents a bronze pin about one-fourth of the natural size, which was found in a tumulus at Sandwick, in Orkney. Another nearly similar to this, preserved in the local museum at Kirkwall, is said to have been found in a cist containing a human skeleton, and sticking in the skull, as if it had been the instrument of death. Other examples of similar pins with rings attached to them have been discovered at various times in the Orkney Islands. But not only have such relics been met with singly from time to time, but occasionally whole groups of graves have been exposed containing Scandinavian weapons and personal ornaments, and in some cases at least appearing to indicate the site of a battle-field in which many of the Northern warriors have fallen. Wallace describes, in his Account of the Islands of Orkney, the discovery of graves in the Links of Tranaby in Westray, "in one of which was seen a man lying with his sword on the one hand and a Danish axe on the other, and others that have had dogs, combs, and knives buried with them." In the spring of 1849 the shifting of the sands during the continuance of high easterly winds brought to light a remarkable group of graves on the Links of Pier-o-waal at Westray. A partial notice of this interesting discovery was communicated by Mr. T. Crofton Croker to the Journal of the Archæological Association,[1] accompanied with illustrations engraved from various of the articles found deposited with the dead. The following details are chiefly supplied from notes by Mr. William Rendall, surgeon, who repaired to the Links of Pier-o-waal on learning of the discovery of the graves, and wrote down these observations as they fell under his notice.[2] Though in some cases less

[1] Journ. Archæol. Assoc., vol. ii. p. 328.

[2] I am indebted for these to Lieutenant Thomas, R.N., to whom the notes were supplied by Mr. Rendall.

ample than might be desired, they supply an exceedingly interesting series of data in illustration of the sepulchral relics of Orkney belonging to the latest Pagan era.

The following group of graves was found near the sea-shore, on the Links of Pier-o-waal, Orkney, on a line running north and south.

No. 1. This grave appeared to have been previously disturbed. Sufficient traces of the skeleton were found to indicate that the body had lain north and south, rather inclining to the right side, with the face towards the sea. Only half of the skull remained, and from its appearance it might have been cleft when interred. A small iron hatchet lay before the body. Half of a helmet was also discovered, and small pieces of iron were scattered around, apparently indicating that the occupant of the grave had been buried in armour.

No. 2 contained part of a human skeleton along with that of a horse. The horse lay on its belly, with its head towards the sea, and directly north-east, with its hinder parts towards the south-west. The horse's head, which was quite entire and of rather a small size, was resting on the nose. On removing it, an iron-bit with one of the bridle-rings attached, was found between its jaws. The remains of the human skeleton were lying immediately in front of the horse's head, with the feet towards the north, and the thigh bones crossed. No skull could be found. On the right side of the skeleton lay a buckle and a piece of bone which had been attached to metal. A piece of iron, either a small sword or a spear-head, and considerable remains of iron rust, shewed that in this case also the deceased warrior had been laid to rest accompanied with the panoply of war. Part of the skeleton of a dog was discovered in the same grave.—No. 3 also contained portions both of a human skeleton and of a horse. The position of the former could not be ascertained. Beside it lay a small dagger, and other remains of iron weapons or armour were found in fragments in the grave. No. 4 contained a skeleton, lying north and south, on its right side, and with the knees drawn up towards the abdomen. No remains of armour were found.

This interesting group of early graves appears to have been entirely distinct from those alluded to in Mr. T. Crofton Croker's account. The second group, to which he refers, is described by Mr. Rendall as having been discovered surrounding a tumulus, or mound of sand and small stones, at a considerable distance from the sea, in a line running north-west from the former site of graves.

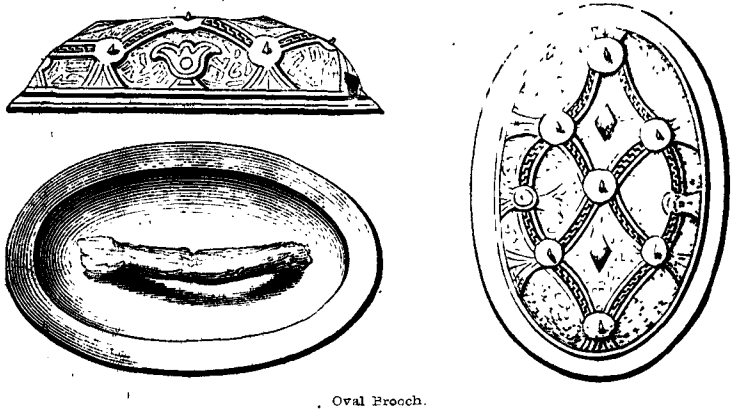
No. 1 was found on the south-west side of the mound. It contained a large male skeleton nearly entire, lying north and south, with the head to the north, and having large stones set round it in a square form: doubtless the usual rude cist so generally adopted in the Pagan sepulture of the north of Europe. After carefully removing the sand, the skeleton was discovered lying inclined towards the left side, with the knees drawn up, and the arms crossing over the breast. About two inches from the top of the head was found a cup-like piece of iron, described by Mr. Rendall as "evidently the part of a helmet." Notwithstanding its position, however, it was more probably the umbone of a shield, of which other remains were discovered in the cist, consisting of pieces of wood, with fragments of the iron covering still adhering to them. On the left side of the skeleton lay an iron sword, measuring about four feet in length; a large sharpening stone, a comb, and several glass beads, were also found in the grave.

No. 2. On the north side of the mound a second grave was opened, which contained a small skeleton, lying north and south, and supposed by Mr. Rendall to have been a female. In this and following examples the position differed from that previously described in having the head to the south. No fragments of iron or indications of rust suggested the former presence of arms or armour, but on the breast lay a pair of the large oval or shell-shaped brooches, already described; and lower down, right over the region of the stomach, was found another ornament of the class of trefoil-shaped clasps, described by Mr. Worsaae, in his "Primeval Antiquities of Denmark," as occasionally found in connexion with the oval brooches.[1]—No. 3. A third grave, opened on the north side of the mound, disclosed a small skeleton lying between two rows of stones. This appears to have been the grave most minutely described and illustrated in Mr. T. Crofton Croker's communication to the Journal of the Archæological Society.[2]

[1] A drawing of this interesting relic, which I had an opportunity of examining, was unfortunately lost, along with a valuable series of notes and sketches made by Lieutenant Thomas, R.N., during his residence in the Orkneys, as the officer in command of the Admiralty Survey. I have since failed in an attempt to obtain access to the original.

[2] Mr. Rendall's own notes are followed in the text, with only such additional information as the notes and sketches of Lieutenant Thomas have supplied. They differ considerably from the description given in the Archæological Journal. In this grave, for example, Mr. Rendall remarks, "no remains of iron were found." It appears probable, therefore, that some confusion exists in the previous account. I may add, the brooches are described as represented, one-half the original size, in the Journal. They are in reality only one-half the diameter,—an error of frequent occurrence in describing the figures of objects of antiquity in archæological works.

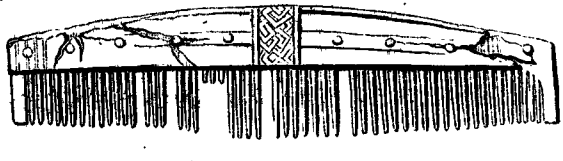
It also contained a pair of the large oval brooches, one of which is here figured one-fourth the original size. Two long combs, decorated



Oval Brooch.

on each side with ornamental carvings, were found, one of them above each shoulder. The teeth of the combs were fastened between two plates of bone, rivetted together with copper nails. A small bronze pin or bodkin was likewise picked up among the interesting contents of this cist. In this case also the skeleton is believed by Mr. Rendall to have been that of a female: an opinion which coincides with the conclusions arrived at by Mr. Worsaae,[1] though the very large size of the brooches seems more suited for the personal decorations of the chieftain or the priest.

No. 4 was another cist on the north side of the mound, but it had been previously disturbed, and contained only portions of a human skeleton.—No. 5 was opened on the north-east side of the mound. It inclosed part of a small skeleton, which Mr. Rendall pronounces to be "evidently that of a female." This also contained a pair of oval brooches, an ornamental pin or bodkin, and a pair of combs. The



woodcut represents one of the combs, which was presented to Mr. Croker. It is much to be regretted that the valuable series of Scoto-

[1] Primeval Antiquities of Denmark, p. 58.

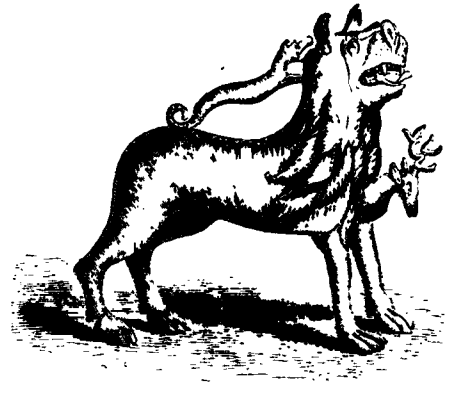
Scandinavian relics, thus brought to light by the disturbance of this tumular cemetery, have already been dispersed in many private hands, so as to be irrecoverably lost. Their value would have been greatly augmented as the illustrations of an important period in our national history, could the entire collection have been kept together, and deposited in some accessible public museum.[1]

One of the bronze pins found in the above graves is figured in the Journal of the Archæological Association. Like others previously noticed it has a ring at the head, though it is otherwise much ruder than the example found at Sandwick. It is engraved here about two-thirds of the size of the original, which was thickly encrusted with verd antique when discovered. It is described in the notes furnished to Mr. Croker as "a sharp-pointed metal instrument, hardly a span in length, having a circular ring of the same metal for a head. It was found lying on the abdomen. This was the skeleton of an aged person, of the ordinary size. It was nearly entire. This grave was both covered and surrounded by large flat stones."

Such are some of the traces of Scandinavian influence which the Scottish archæologist meets with in the course of his researches. They all belong to a comparatively recent period; and of the beautiful class of personal ornaments, the oval brooches, which are so frequently found, Mr. Worsaae remarks, "that they are positively to be referred to the last period of Paganism we know with complete certainty, because they are frequently found in graves in Iceland, which country was first peopled by Pagan Norwegians at the close of the ninth century." Long before that date, however, Christianity had reached the Scottish shores; and though impeded, and even frequently eradicated from districts where it had taken deep root, chiefly by the malign influence of these Pagan Northmen, we have no reason to think it was ever entirely extinct. Hence we are abundantly justified in claiming a native origin for the Pagan arts of Scotland, and in referring all Scandinavian influence to a late period and a very limited locality.

[1] After repeatedly writing, I have, in most cases, failed in obtaining any reply to my inquiries respecting these relics. They have probably already experienced the usual fate of private collections of objects of national antiquity: and have been thrown aside and forgotten or lost so soon as the novelty of first possession was over.

One other singular class of Northern relics of which analogous types have been found in Scotland, remains to be noticed. These consist of a curious variety of vessels, presumed to have been designed for holding liquors, but invariably made in the form of some animal or monstrous hybrid. They differ entirely from any class of antiquities hitherto noticed, and more nearly resemble ancient Indian bronzes than any of the relics of early Northern art. The annexed figure represents one of these, in the collection of Charles Kirkpatrick Sharp, Esq., and found by him among a hoard of long-forgotten family heirlooms, in a vault of his paternal mansion of Hoddam Castle, Dumfriesshire.



Of its previous history nothing is known. It is made of bronze. The principal figure is a lion, without a tail, measuring fourteen inches in length, and nearly fourteen inches in greatest height. On the back is perched a nondescript animal, half greyhound, half fish, apparently intended for a handle to the whole, while from the breast projects a stag's head with large antlers. This has a perforation in the back of the neck, as if for the insertion of a stop-cock, and it appears probable was designed for running off the liquid contained within the singular vessel to which it is attached. A small square lid on the top of the lion's head, opening with a hinge, supplies the requisite aperture for filling it with whatever liquor it was designed to hold. A similar relic, possessed by Sir John Maxwell, Bart., was dug up a few years since on the Pollock estate, and another in the collection of the late E. W. A. Drummond Hay, Esq., was also in the form of a lion. The conclusion which the appearance of the whole of these relics would suggest to an observer unfamiliar with Northern antiquities, would certainly be that they were the products of ancient Indian rather than of Scandinavian art. The following account, however, derived from Kluver's Norwegian Antiquities,[1] will shew that they are well known not only in Norway and Denmark, but even in Iceland—that interesting Northern stronghold of the later relics of Scandinavian art.

[1] Norste Mindesmarter. Christiania, 1823, pp. 46-48, Plate II. figs. *a*, *b*, *c*.

"On the farm of Vaaden, about five miles south-west from Drontheim, there was found some years ago in a field, and at no great distance from the surface, an animal form with beak and wings. In its beak it carries a man wearing a kirtle and closed helmet, booted and spurred. The figure, which is of brass composition, weighs five and one-half pounds. It is hollow internally. There is an aperture on the neck of the animal, which has been provided with a lid, and another aperture in the back of the helmet worn by the mailed figure which it carries in its beak. Another animal figure has been preserved from time immemorial, at Moldè, a small seaport a little to the south of Drontheim. It resembles a unicorn, and has an aperture in the neck, to which obviously a lid had been attached. From the handle along the back, which represents a serpent, and the circumstance of the horn in the forehead being hollow, it may reasonably be conjectured to have been used as a liquor decanter. A third figure of a similar description, which is said to have been found under ground at Helgeland—a province situated to the northward of Drontheim—represents a knight mounted on a piebald horse in complete armour, wearing a coat of ring-mail, a square helmet with vizor down, and carrying a drawn sword in his hand. In this figure likewise there is an aperture in the upper part of the helmet, and another in the forehead of the horse."

The whole of these singular groups are figured in Kluver's work, and it will be seen that they closely correspond to the Scottish example from Hoddam Castle. The costume of the knights in two of them shews that they cannot be assigned to an earlier date than the latter part of the thirteenth century. They are all nearly of the same proportions, measuring about ten inches in length, and six inches in height, exclusive of the mailed knight mounted on the horse in the figure last described. Another curious specimen of the same class of antiquities, in which the principal figure is a lion, has been preserved for ages in the church of St. Olaf, at Vatnsfjord, in Iceland, and is described by Professor Sjöborg, who conceives it to have been used as a lamp. It is also referred to by Professor Finn Magnusen in the following remarks on those figured by Kluver:—"These curious liquor decanters—of which various specimens exist in Denmark and other countries—are of a very remarkable formation. The two first seem to bespeak an origin in the heathen mythology. Assuming that even in the middle ages or at a later period they were used in the rites of the Catholic Church, as in the instance of a like vessel, known by the name of the Thorlacian, presented to the church at Vatnsfjord, still it is by no means certain that such was their original purpose. Many articles, such as tapestries, cups, vases, candlesticks, &c., were used as household commodities before they were diverted to ecclesiastical purposes. In the same way these liquor decanters, which

neither bear the forms nor devices of Christian art, have probably been originally adapted to another use." It will be readily admitted that these relics present little appearance of having been designed as any of the sacred vessels of the mediæval church; nevertheless little doubt can be entertained that they were so used in the north, and perhaps at an early period throughout Christendom, as part of the furniture of the altar. Professor Munch, who examined the example figured above, in the collection of Mr. Sharp, during his recent visit to this country, observes in a letter written since his return to Norway: "Notwithstanding their fantastic shapes, of some four-footed beast, they were used upon the altar as vessels containing the water which the officiating Diaconus poured upon the hands of the priest before his touching the host at the elevation. I understand from Mr. Thomsen, who learned it from a Frenchman educated at Smyrna, that such vessels are still used for the same purpose in the Roman Catholic chapels in the Levant. It is therefore probable that those found in Norway have either been brought from Byzantium, or made after Byzantine models."

The ecclesiastical character of these singular relics would therefore seem to be more certainly established than their Scandinavian origin, though it may still be doubted whether they were primarily designed for any sacred purpose. It is, however, sufficient for our present object to trace the analogy discernible between the Scottish relic figured above and those Scandinavian antiquities discovered in the native country of the old Northmen, or preserved in their ancient seat of colonization on the verge of the Arctic Circle. In the latter instance, at least, we find them devoted to the uses of the church and placed alongside of its most sacred furniture; while to all appearance they seem to be more adapted to social purposes, which, among the northern nations especially, are most allied to excess.

These objects of Northern antiquity, however, form a class by themselves, and bear no analogy to the prevailing types of the last Pagan period, either in the Scandinavian countries or in Britain. However clearly the facts above referred to shew that they pertain to the antiquities of Norway and Denmark, they cannot be assigned to the same era of Northern art, which produced the beautiful oval brooches and other contemporary relics. They seem rather to point to a later period of intercourse with the East, when the Cufic coins, which are familiar to Northern antiquaries, were introduced. The oldest of these

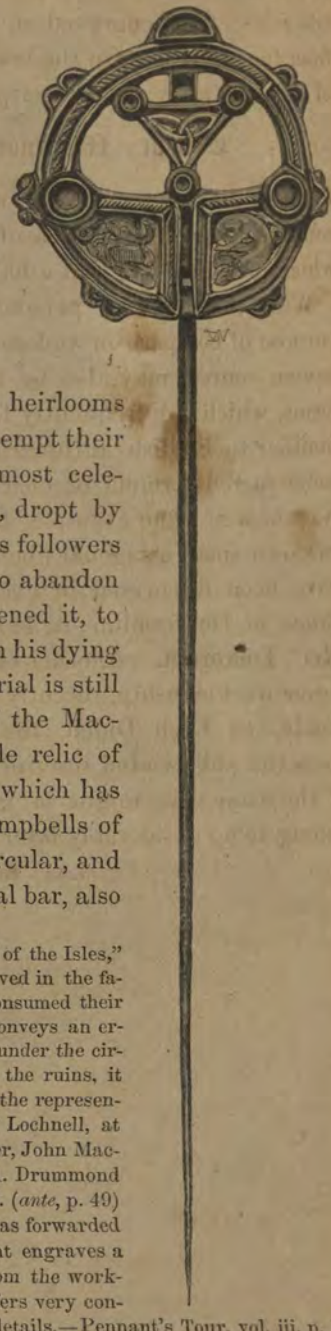
date as early as the year 79 of the Hegira, or A.D. 698, but they have been found of A.D. 1010, and may be presumed to have reached the north of Europe at a somewhat later period than the last of these dates.

Beautiful as some of the relics of Scandinavian art found in Scotland are, they can hardly be considered equal to contemporary examples of native workmanship, such as the very fine early Scottish brooch found in the vicinity of the mounds of Dunipace, and figured on a previous page. Compared with the Caithness oval brooch, selected as the very best of its class, it will, I think, be generally acknowledged as exhibiting both a more defined and a higher style of art. But independently of the beauty of this native relic, nothing is more remarkable than the striking contrast which it presents in form, and style of ornament, to any known class of Scandinavian personal ornaments, while, like most of the later native examples, it bears a close affinity to the contemporary productions of Irish art. The woodcut shews the ornamental interlaced knotwork on the upper portion of the acus, which, in the complete view of the brooch, is concealed by the central ornament.[1] In its imperfect state it is sufficiently apparent that this had been of the same disproportionate length as is frequently found in Irish examples, otherwise greatly varying in form. This is particularly the case with the ring fibulæ, generally of silver. One of these, found in county Antrim, and engraved in the Archæological Journal, measures above six and one-fourth inches long,[2] while a larger and still more beautiful one, in the Museum of Trinity College, Dublin, is nearly fourteen inches in length. This singular feature in the brooches of the early Christian Period both of Scotland and Ireland, most probably had its origin in some peculiar fashion of the Celtic dress, superseded in the former country during the vital changes which affected it in the eleventh century. The annexed woodcut shews another beautiful Scottish brooch, also from the collection of Mr. John Bell of Dungannon. It is of less costly material than the Dunipace brooch, being made of bronze, but, like it, it has been jewelled, and is otherwise little inferior

[1] *Ante*, p. 530.

[2] Archæol. Journal, vol. vi. p. 70.

in point of workmanship. It was found accidentally amongst old brass, in a brazier's shop in Glasgow, and is engraved here the full size of the original.



The brooch has always been a favourite Celtic ornament, and is indeed almost indispensable to the Highland costume. It is worn universally by the Scottish Highlanders, both male and female; and in many Highland families, of various ranks, favourite brooches have been preserved through many generations, as heirlooms which no pecuniary inducement would tempt their humblest owner to part with. The most celebrated of these is the brooch of Lorn, dropt by Robert the Bruce after the defeat of his followers at Methven, when he was compelled to abandon his mantle and the brooch which fastened it, to rid himself of an assailant who held it in his dying grasp. This interesting historic memorial is still preserved by the lineal descendant of the Macdougals of Lorn.[1] Another remarkable relic of the same class is the Glenlyon brooch, which has been preserved in the family of the Campbells of Glenlyon for many generations. It is circular, and of silver, richly jewelled. An ornamental bar, also

[1] Sir Walter Scott, in his Notes to the "Lord of the Isles," remarks that the brooch of Lorn "was long preserved in the family of Macdougal, and was lost in a fire which consumed their temporary residence." This though true in fact conveys an erroneous impression. The brooch was indeed lost under the circumstances referred to, but being recovered from the ruins, it passed into other hands, and was only restored to the representative of the Macdougals by General Campbell of Lochnell, at the Argyleshire county meeting in 1825.—MS. letter, John Macdougal of Macdougal, Esq., Captain R.N., to E. A. Drummond Hay, Esq., March 1828. The engraving on Plate III. (*ante*, p. 49) is from a drawing taken from the original, which was forwarded for that purpose by Captain Macdougal. Pennant engraves a fine early copy of it, executed, as he conceived from the workmanship, in the time of Queen Elizabeth. It differs very considerably from the original brooch in the minuter details.—Pennant's Tour, vol. iii. p. 14.

jewelled, crosses the centre, and two tongues meet on this from opposite sides. It is engraved on *Plate* II. from careful drawings made from the original. On the lower side are the names of the three Kings of Cologne, a favourite inscription on medieval amulets, thus,—

Caspar . Melchior . Baltazar . Consumatum .

Pennant has engraved this ancient Scottish brooch, but the figure conveys a very partial idea of the rude magnificence of the original, which measures five and a half inches in circumference.[1]

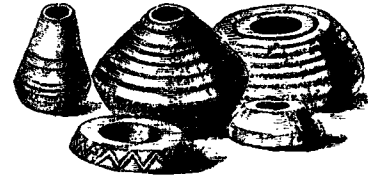
With these native personal ornaments, introduced here for the purpose of comparison and contrast with those traceable to a Scandinavian source, may also be noticed the silver brooches, of various forms, which are frequently found in Scotland, and are also not unfamiliar to English antiquaries. They are invariably inscribed with some sacred formula or charm, the most common one being IESUS NAZARENUS. One example, in the Museum of the Scottish Antiquaries, is a small octagonal fibula, without ornament, which is said to have been discovered in excavating the tomb of King Robert the Bruce, at Dunfermline, in 1818. It is inscribed,—Iesus . Nazarenus Rex . Iudeorum. Another of the same form, but larger, and of superior workmanship, recently found among the ruins of Eilan Donan Castle, on Loch Duich, the ancient stronghold of the M'Kenzies, bears the abbreviated inscription, Iesus . Nazar. Scottish examples of the same class might be greatly multiplied, but the most of them belong to a considerably later period than that to which we now refer.

[1] Pennant's Tour, vol. i. p. 104, Plate XIII.

CHAPTER V.

AMUSEMENTS.

In the earliest and rudest states of society, war and the chase become at once the business of life, and, with the needful preparations of weapons and other requisites, suffice to supply each day with its full complement of labour and pastime. A very slight rise, however, in the social scale, creates the desire for some artificial means of filling up the leisure hours of life; and the modes adopted for this purpose often form no uncertain criterion of the age in which they originate. We accordingly find traces of the existence of games both of chance and skill from a very remote period. Reference has already been made to spherical and truncated stones, measuring from an inch to an inch and a half in diameter, which are frequently found in tumuli. For the former the name of Bead-stones is proposed, and as they are generally perforated, their use as personal ornaments has been assumed as probable, notwithstanding their cumbrous size, and the unattractive appearance of many of them. But as they are also very frequently flat on one side, there is greater probability of the original purpose of the latter class, at least, having been for table-stones (Anglo-Saxon, *tæfelstan*) or draughtsmen, in which case the perforation might serve to string them together, for carrying about. In Ireland, and still more frequently in Norway, draughtsmen are found alongside of the weapons and other relics buried with the warrior. They are made generally of bone, of a



conical or hemispherical shape, and with a hole in the bottom, designed, as is presumed, to admit of their use on shipboard. With these it is supposed the northmen beguiled the tedium of their long voyages; and the estimation in which they are held is implied in their deposition among the most favourite relics of the dead. We learn from Tacitus that the Germans were so passionately addicted to gambling, that they staked not only their property but their personal liberty. The Romans were themselves scarcely less given to such excesses. Among the many interesting relics restored to light from the ruins of Pompeii, not the least valuable as illustrations of the manners of the first century in Southern Italy, are the cogged dice of the old Roman gamblers. But besides these games which mingled the incentive and the excitement of chance and skill, there appears also to have been in use, from a very early period, others of the simpler class, still favourites among our rustic population, such as bowling, nine-pins, and the like; which, under the various names of skales or kayles, loggats, closh, &c., are frequently mentioned in ancient statutes, and have been found represented on manuscripts of the thirteenth and fourteenth centuries. The implements of such pastimes are not such as were likely, in many cases, to be long preserved, though it is by no means improbable that the spherical stone-balls frequently found along with ancient relics, and even in the tumuli, may have been used for some such purpose.[1] One interesting and well-authenticated example, however, is known of the discovery of a complete set of the implements for such a game, in the parish of Balmaclellan, Kirkcudbrightshire. They are thus described by the well-known antiquary, Mr. Joseph Train: "In the summer of 1834, as the servants of Mr. Bell of Baryown, were casting peats on Ironmacaunnie Moor, when cutting near the bottom of the moss, they laid open with their spades what appeared to be the instruments of an ancient game, consisting of an oaken ball, eighteen inches in circumference, and seven wooden pins, each thirteen inches in length, of a conical shape, with a circular top. These ancient *Reel Pins*, as they are termed by Strutt, were all standing erect on the hard till, equidistant from each other, with the exception of two, which pointed towards the ball that lay about a yard in front, from which it may be inferred they were overthrown in the course of the game. The ball has been formed of solid oak, and, from its decayed state, must have

[1] *Ante*, p. 139.

remained undisturbed for centuries, till discovered at a depth of not less than twelve feet from the original surface. At Pompeii, utensils are often found, seemingly in the very position in which they were last used. This may be accounted for by the suddenness of the calamity that befell that devoted city; but what induced or impelled the ancient gamesters, in this remote corner of the Glenkens, to leave the instruments of their amusements in what might be considered the middle of the game? These relics, which are in my possession, can now only be prized for their curiosity, the singular position in which they were found, and the relation they bear to ancient times."[1] The moss in which this remarkable discovery was made is described as a place where peats have been cut from time immemorial. It were vain to speculate on the origin or owners of these homely relics of obsolete pastimes; yet to the curious fancy, indulging in the reanimation of such long-silent scenes, they seem suggestive of the sudden intrusion, it may be, of invaders, the hasty call to arms, the utter desolation of the scene, and then the slow lapse of unnumbered centuries, during which the moss accumulated above them so gently that it seems as if the old revellers were to return and play out their unfinished game.

Amusements of the latter class scarcely admit of much refinement, and may well be supposed to have exercised fully as much ingenuity among the ancient players of the Glenkens, as they now do in the bowling-green or skittle-ground. From them, indeed, modern refinement has educed the practised art of the billiard-table. In a simpler age the improvement assumed a more practical form, and gave way to putting the stone, throwing the hammer, and the like trials of strength, which appear to have been favourite pastimes among the Scottish Highlanders from the earliest periods to which their traditions extend.

In complete contrast to these are the amusements indicated by the bone draughtsmen or bead-stones of the tumuli. They are appropriately classed by Strutt, in his "Sports and Pastimes," under the general title of "Sedentary Games;" and he furnishes much curious information regarding medieval pastimes, of which traces may be detected in the remoter periods into which we are inquiring. The construction of regular draughtsmen and chessmen is in itself an evidence of increased taste for such amusements. The ancients employed

[1] Hist. of Galloway, vol. ii. App. p. 67. New Stat. Acc., Kirkcudbrightshire, vol. iv. p. 103.

stones, shells, or nuts as counters, and also, there is reason to think, as tablemen, in games of this nature. Hence the Greek name ψηφοι, and the Roman *calculi* and *scrupuli;* from whence *scrupus*, a tableman, or chessman. The Scandinavian terms are of similar import; and among the ancient Northern games which have survived as popular pastimes in Iceland and Lapland, we find the very same which figure among the illuminations of medieval manuscripts, and have influenced the grotesque decorations of our early ecclesiastical architecture. "Of such games," says a writer in the Report of the Royal Society of Northern Antiquaries, "we find that our Pagan ancestors were acquainted with at least three different sorts, namely, *hnefatafl*, fist-play, *i.e.*, hand-play;[1] *hnottafl*, nut-play; and *skáktafl*, chess. *Hnottafl* signifies properly a game played with nuts, or pieces shaped like nuts. A *húni—i.e.*, a bear, or bear's cub—was anciently the principal personage in it; but in Iceland, where the fox is the only beast of prey, this animal eventually superseded the bear, and the game then came to be denominated *refskál*. The other pieces represented sheep, or lambs, pursued by Reynard. In the variety of this game, which still forms one of the favourite diversions of the Laplanders, the fox continues to play his part, with this difference, that he there pursues geese instead of lambs; as in the *Gänsespiel* of the Germans, the *Fox and geese* of the English, the *Ganzespeel* of the Dutch, the *Jeu d'oie* of the French, &c. In Denmark a dog usually takes the place of the fox, and hares of the geese; and hence the game is there called *Hund og hare*, or hound and hare." According to the Irish chroniclers, Cahir Mor, who died A.D. 177, left, among other legacies to his son, both chessboards (*fichell*) and chessmen (*muintir;*) and the Welsh laws of Howel Dha, (*circa* A.D. 943,) refer to some species of game played with pieces of different colours, (*werin,*) on a table-board, (*tawlbwrdd.*) In Bishop Percy's "Translation of Runic Poetry," a Northern hero says,—"I am master of nine accomplishments. I play at chess; I know how to engrave Runic characters," &c.; and in a curious Anglo-Saxon poem, translated for the first time into English by Mr. J. M. Kemble in his paper on Anglo-Saxon Runes, this stanza occurs:—

[1] This game still survives among the juvenile sports of Scotland, played with cherry stones, or *paips*, *Ang.* pips, and called *nieves*, *i.e.*, fists, from their being held in the closed hand. Some of these games with *paips* may perhaps claim a classic origin. Ovid alludes to one played with nuts,—*Nux Elegia*, ver. 72. Hence the phrase *nuces relinquere*, to put away childish things; to become a man.

Chessman is ever
Play and laughter
To the proud, where
Warriors sit
In the beer-hall
Blithe together.

It is not necessary to assume that all, or indeed any of these allusions necessarily apply to the game of chess, but only to one of the old table-games, played with pieces, many of which will more readily account for the "play and laughter" in the warrior's hall than that skilful and complicated game. These, as well as so many other of the primitive arts and rites of the North, were in all probability brought with the earlier nomades from the eastern cradleland of our race; for more than one representation of such table-games has been discovered among the pictorial decorations of the Egyptian temples. Dr. Brunton has figured two of these at Medinat Haboo, in his *Excerpta Hieroglyphica*, in one of which (*Plate* XIII.) the table and pieces are partly obliterated, but in the other (*Plate* XI.) it is observable that the pieces are all alike, resembling the most common modern form of chess-pawns. The players are also in both cases moving their pieces at the same time; so that the Egyptian game evidently bore very slight resemblance to chess, and may with more probability be sought for among the early table-games of the north of Europe.

The great antiquity of the game of chess has been long since established on indisputable evidence. For its invention and earliest form the best authorities agree in looking to India, whither the simpler table-games of Egypt may have passed before the migration of the Teutonic races from Asia, and been returned from thence to Europe in their later and more complicated forms. In the ninth century, while yet the Northmen were only known along the British coasts as the dreaded marauding Vikings, Ragnar Lodbrog is reputed to have visited the Hellespont, and the intercourse between the Scandinavians and the Greeks of the Lower Empire, is an accredited feature of well authenticated history. But pilgrimages to Rome, and the passing and repassing of the clergy from Britain to the Continent, were matters of common occurrence at an earlier date; so that there can be no difficulty as to the means by which the game might be introduced from Asia to the north of Europe. Into this curious question Sir Frederick Madden has entered with great learning and ability, collecting the numerous observations of previous writers, and illustrat-

ing them from his own copious stores.[1] It will suffice for our present purpose to notice the remarkable illustrations of the implements of this game which have been discovered in Scotland, surpassing in number and value any specimens of ancient chessmen known to exist, if we except the set still preserved in the Cabinet of Antiquities in the Bibliothèque du Roi at Paris, and which there is satisfactory evidence for believing may be the very chessmen presented to Charlemagne by the Empress Irene, or her successor Nicephorus.

In the spring of 1831, the inroads effected by the sea undermined and carried away a considerable portion of a sandbank in the parish of Uig, Isle of Lewis, and uncovered a small subterranean stone building like an oven, at some depth below the surface. The exposure of this singular structure having excited the curiosity, or more probably the cupidity, of a peasant who chanced to be working in the neighbourhood, he proceeded to break into it, when he was astonished to see what he concluded to be an assemblage of elves or gnomes upon whose mysteries he had unconsciously intruded. The superstitious Highlander flung down his spade, and fled home in dismay; but incited by the bolder curiosity of his wife he was at length induced to return to the spot, and bring away with him the singular little ivory figures, which had not unnaturally appeared to him the pigmy sprites of Celtic folk-lore. They consisted in all of at least ninety-two pieces, including fourteen tablemen or draughtsmen, eight of which are kings, eight queens, thirteen bishops, fifteen knights, and twelve figures of footmen, to which Sir Frederick Madden gives the name of warders.[2] These have been so carefully and minutely illustrated in the valuable remarks in the Archæologia, that a slight description will now suffice.

[1] Archæologia, vol. xxiv. p. 203.

[2] The account in the text differs as to the number of pieces, as well as in some other and more important points, from that given in the Archæologia, (vol. xxiv. p. 212.) Sir F. Madden, however, only describes those which were acquired by the Trustees of the British Museum. Charles Kirkpatrick Sharp, Esq., to whom I owe these particulars, possesses eleven pieces, consisting of two kings, three queens, three bishops, one knight, and two warders. Ten of these he selected from the whole, previous to their possessor, Mr. Roderick Ririe, offering them to the Trustees. The remaining one was afterwards obtained from a person residing in Lewis. Sir F. Madden is also mistaken in speaking of their having been long subject to the action of salt-water. They were found at some distance from the shore; a sudden and very considerable inroad having been made by the sea. A minute of the Society of Scottish Antiquaries, referring to the exhibition of these chessmen, 11th April 1831, describes them as "found buried fifteen feet under a bank of sand." Mr. Sharp has in his possession the original receipt given to Mr. Ririe by the jeweller in Edinburgh, with whom they were deposited, which describes them as "fifty-eight figures, thirty-four pieces, and a buckle of ivory or bone."

They form altogether portions of eight or more sets, none of which, however, appear to be complete. They vary considerably in size, the largest king being four and one-eighth inches in height, while the smallest measures fully an inch less; but the smaller sets are, upon the whole, more carefully and elaborately carved. The annexed illustration represents one of the smaller kings, now in the collection of Mr. Sharp. In point of costume it closely resembles the example engraved in the Archæologia, as well as the others of the set, though differing somewhat in the fashion of the beard. The king is represented as an old bearded man, with long hair falling in plaits over his shoulders, and a low trefoil crown on his head. He is seated on a chair with a high back, richly carved with intricate tracery and ornaments, corresponding, for the most part, to the style of decoration with which we are familiar on the Romanesque work of the twelfth century, and holds a short sword with both hands across his knees, as if in the act of drawing it.

The queens are crowned and throned in like manner. They are represented seated in a contemplative posture, resting the head upon the hand; and two of them hold drinking horns in their left hands. The most striking portion of their costume, represented in the accompanying engraving from one of those in Mr. Sharp's collection, is a species of hood depending from the back of the head, and spreading over the shoulders.[1]

Of the bishops some are seated in

[1] The queen figure, of which a back view is given in the engraving in order to shew the peculiar form of the head-dress, holds in the left hand a horn similar to that which one of the queen figures now in the British Museum bears. In cutting this figure the carver has exposed the core of the tooth, and the side of the chair here seen is formed of another piece of ivory attached to it with pins of the same material. This is so neatly done that Mr. Sharp's attention was called to it for the first time when I was drawing the piece.

chairs similar to those occupied by the kings and queens, while others are in a standing posture. Sir F. Madden remarks, "all of the sitting figures and four of the standing ones wear the chasuble, dalmatic, stole, and tunic of the form anciently prescribed, and corresponding with representations of much greater antiquity. The remainder have a cope instead of a chasuble, but omit the stole and dalmatic. The mitres are very low, and in some instances quite plain, but have the double band or *infulæ* attached behind. The hair is cut short round the head. They hold a crosier with one or with both hands; and in the former instances, the other hand holds a book or is raised in the attitude of benediction."

The knights afford perhaps the most characteristic examples of the costume of the period. They are mounted on horseback, armed with a heavy spear, and a long kite-shaped shield. Beneath the shield appears the sword, attached to the waist by a belt. The helmets are mostly of a conical shape, in addition to which several have nasals projecting in front, and round flaps protecting the ears and neck. The horses are caparisoned in high saddles, stirrups, and bridles, and with long saddle-cloths, fringed with ornamental borders, reaching to the ground.

The footmen or warders bear the same kite-shaped shields as the horsemen, and are armed with swords and head-pieces of iron of different forms. The costume otherwise worn by them has obviously been made subservient to the convenience of the carver, as in the long saddlecloths of the horsemen, and consists, for the most part, of an ample flowing robe, reaching to the ground and concealing the feet. Numerous variations occur in the details of these remarkable carvings, and the utmost variety of design characterizes the ornamentation of the chairs on which the kings, queens, and bishops are seated. Their dresses also vary in ornamental detail, and each of the shields, both of the knights and warders, is decorated with some peculiar device or interlaced pattern, some of which approach very nearly to the heraldic blazonry of a later period, and no doubt indicate the first accidental rudiments of medieval cognizances.

The various details of costume and ornament indicated in this brief description, furnish the chief evidence by which we may hope to assign the period and place of manufacture of these interesting works of early art. This question has already been discussed with much learning and ability by Sir Frederick Madden, who remarks, "I shall

now proceed to develop the result of my inquiries in respect to the place where and the period when these chessmen were in all probability manufactured. I shall draw my inferences from three separate subjects of consideration; the material of which they are made, the costume in which they appear, and the historical passages to be found in the ancient writings of Scandinavia; and from each I shall endeavour to prove that these pieces were executed about the middle of the twelfth century, by the same extraordinary race of people who, at an earlier period of time, under the general name of *Northmen*, overran the greater part of Europe." Against the conclusions carefully arrived at by following out this proposed course of reasoning, with the exception of the period to which they are assigned, I venture, in all deference, to enter a demurrer. It has been so long the fashion to assign every indication of early art and civilisation found in Scotland to these Scandinavian invaders,—though, as I trust has already been shewn, in many cases without evidence and upon false premises,—that it becomes the Scottish archæologist to receive such conclusions with caution, even when advanced by high authorities and supported by evidence. The farther we pursue this investigation into the history of primitive native art we find the less reason to assign to it a foreign origin, or to adopt the improbable theory that the rude Scandinavian rovers brought with them from the Pagan North new elements of civilisation and refinement to replace the Christian arts which they eradicated at the point of the sword. Singer justly remarks on the characteristic difference between the Greek and Scandinavian traditions of the mythic artist, Dædalus or Weland, that the Greeks ascribed to theirs: "Plastic works, and above all images of the gods, while the Scandinavians attributed to their workman principally weapons of a superior temper. It is that the Greeks were a people alive to the beauty of mythologic representations. The Scandinavians, on the contrary, valued nothing but good swords, with which they conquered that which the rude climate of the North denied them."[1] Doubtless, by the middle of the twelfth century a very great change had taken place, but then we trace it not in the invention of a northern Christian art, but in the tardy adoption of what was already common to the ecclesiology and arts of Christendom.

As to the material of the Lewis chessmen, the mere fact of their being made of the tusks of the *Rostungr* or Walrus—the "huel-bone"

[1] Singer's Wayland Smith, p. lxxiii.

of Chaucer—can no more prove their Scandinavian origin, than that of the still older set of Charlemagne being of ivory[1] (presuming this to mean the elephant's tusk) affords any evidence of Indian manufacture. By the middle of the twelfth century, the Northmen had traded as well as warred with Scotland for nearly three centuries, and were at that late period, as Mr. Worsaae remarks, "the central point for an extensive commerce between the east and the northern parts of Europe."[2] The author of the *Kongs-Skugg-sio,* or Speculum Regale, composed, as Einersen concludes, between the years 1154-1164, but certainly before the close of the century, takes particular notice of the Rostungr, and mentions also the circumstance of its teeth and hide being used as articles of commerce. Such indeed almost of necessity follows from the evidence of the frequent voyages of the Scandinavians in pursuit of these animals, at a time when they had abandoned the old predatory habits of the Vikings for a regular government and peaceful intercourse with other nations. The nature of their settlements on the Scottish islands and mainland, and their alliances and intermarriage with the aboriginal race, may also suffice, if further proof be needed, to shew that the walrus ivory could be no great rarity in Scotland, when it formed a special article of commerce with the Northmen. We accordingly find distinct evidence of its native use: "Ivory dirk-hilts, elegantly turned or wrought by the hand, were manufactured in various parts of the Highlands and isles. Of these specimens still remain at Fingask and Glengary,"[3] and a curious large sword, evidently of early date, preserved at Hawthornden, near Edinburgh, has the hilt made of the narwhal's tusk. The argument of Scandinavian origin from the material is therefore of no value, and the varied devices on the chairs and other highly decorated portions of the Lewis chessmen are equally little indicative of Northern art. They are the same details as are familiar to us on the Romanesque work of the twelfth century, never yet traced to a Northern source. In St. Magnus Cathedral we have a most valuable specimen of Romanesque style, executed in obedience to the piety of a Scandinavian jarl of the Scottish Isles, but so far from finding in it any trace of a style peculiar to the Northmen, its oldest portions are characterized by the

[1] "L'Empereur et Roy de France, Sainct Charlemagne, a donné, au Thresor de Sainct Denys un jeu d'eschets, avec le tablier, *le tout d'yvoire.*"—Hist. Abbey of St. Denis, 1625.

[2] Primeval Antiquities of Denmark, p. 148.

[3] Stuart's Costume of the Clans, Introd. p. xxxiv.

usual features of the fully developed style, manifestly derived from Southern models, and betraying in these the later date of its foundation than the examples of the same class which still remain at Durham and Dunfermline. No Scandinavian ecclesiologist, I believe, doubts the foreign origin of the few examples of the earlier styles of medieval ecclesiastical architecture still remaining in Norway and Sweden; and the evidence already adduced tends to suggest the conclusion that whatever military and naval skill the natives of Scotland might acquire from their intercourse with the Northmen, they were much more likely to impart than to receive a superior knowledge in the arts of the sculptor and the carver. Christianity was introduced into Scotland and Ireland some centuries before its acceptance by the Scandinavians, yet the primitive Christian monuments of Denmark or Norway will, as works of art, bear no comparison with those which preceded them in Scotland.

To the costume of the twelfth century we must therefore look for the only safe guide to the origin of the Lewis chessmen. Those of the kings and queens are of little value for this purpose, and those of the bishops, though minutest of all, of none. It is to the military costume of which the knights and footmen afford such curious examples that we must have recourse for some solution of the question. But these also are mostly of Southern and not of Scandinavian origin. Both the shield and the pointed helmet are what would usually be styled Norman. We find the kite-shaped shield represented in the Bayeux tapestry; a curious example of it is engraved on a candlestick of the twelfth century, now in the collection at Goodrich Court;[1] and a still more conclusive instance is the remarkable group of warriors, each with nasal, spear, and kite-shaped shield, sculptured on the lintel of the doorway of Fordington Church, Dorchester, *circa* 1160.[2] Sir S. R. Meyrick conjectures that the Normans derived this shield from Sicily. There is, at any rate, good evidence for believing that while it was in use in Britain early in the twelfth century, the Northmen retained their round shield till a later period. Judging from Mr. Worsaae's valuable treatise, as well as from the "Guide to Northern Antiquities," the round shield appears to be alone known among the defensive arms of the latest Pagan period, which closes little more than a century prior to the probable date

[1] Archæologia, vol. xxiii. Plate xxviii. p. 317.

[2] Glossary of Architecture, fifth edit. vol. ii. Plate lxxiii.

of the Lewis chessmen. But Sir F. Madden has referred to an authority the bearing of which on this point has escaped him, although it seems conclusive. The passage is that in Giraldus, (quoted from a MS. temp. John,) in which he describes the descent of the Norwegians under Hasculph or Asgal, to attack the city of Dublin, then defended by Miles de Cogan, about the year 1172, as follows: "A navibus igitur certatim erumpentibus, duce Johanne . . . viri bellicosi Danico more undique ferro vestiti, alii loricis longis, alii laminis ferreis arte consutis, *clipeis quoque rotundis et rubris*, circulariter ferro munitis, homines tam animis ferrei quam armis, ordinatis turmis, ad portam orientalem muros invadunt." Such shields, formed of wood bound with iron, and with an iron umbo in the centre, are still preserved in Norway, and correspond not only to the requisitions of the old Gulathings-law, cap. 309, circa 1180, but even to a later one—circa 1270. Into the minuter details of *wambeys*, *gambeson*, *panzar*, &c., referred to in the Archæologia, it is needless to enter, because most of them are wanting on the chessmen, or can at best only be guessed at. Were the swords and shields removed from the warders, along with their beards, so little would any one dream of detecting such traces of medieval armour in their costume, that even their sex might be in doubt, and some of their conical helmets and gambesons might serve equally well for the scapulars and tunics of gentle nuns.[1] Of the horsemen also little positive can be made out of anything but the helmet and shield; and of the former scarcely two are alike on knights or warders, the difference in some of them amounting to a total dissimilarity in form and fashion. Perhaps the most remarkable feature in the knight-pieces is the small size of the horses, so characteristic of the old Scottish breed. But it is even matter of doubt if the Norse warriors of the twelfth century ever fought on horseback. If they did so at that period, it was a novelty borrowed, like their new faith and arts, from the nations of the south.

[1] *Vide*, in addition to figure shewn here, Archæol. vol. xxiv. Pl. XLVIII. figs. 3, 4.

A figure of a mounted warrior, apparently bearing a close resemblance to the chess knights, with a peaked helmet, carrying a spear, and with a long saddle cloth pendant from his horse, is sculptured in relief, amid knotwork and floriated ornaments, on an early monumental slab in the Relig Oran at Iona. A claymore of antique form occupies the centre of the slab, but the shield is concealed by the position of the figure. It is not, however, to the sculptured monuments either of Scotland or of Norway and Denmark that we must look for identifying the costume of these figures with any contemporary examples. Fortunately the same class of evidence has been preserved, on perhaps still more trustworthy authority, not in marble but in wax, in the royal and baronial seals attached to early charters. From these we learn that prior to the date of the Norwegians assailing Miles de Cogan, armed with their "shields, round and red," both the peaked helmet and nasal, and the kite-shaped shield, were the usual defensive armour of the Scottish baron. On the seal, for example, appended to the charter of Robert de Lundres, c. A.D. 1165, conveying a carucate of land in Roxburghshire to the Abbey of Melros, the knight is represented on horseback in full armour, with a flattened helmet with nasal and a kite-shaped shield.[1] So also in the seals of Uchtred, son of Osulf: William son of John: Philip de Valoniis, chamberlain of Scotland, c. A.D. 1176; and on that of Richard de Morville, constable of Scotland, appended to a charter A.D. 1176: all among the charters of the Abbey of Melros, about the middle of the twelfth century, we find the kite-shaped shield, the nasal, and the peaked helmet; while in the very beautiful seal of Patrick de Dunbar, c. A.D. 1200, the nasal appears attached to a round chapel-de-fer, very similar to those worn by some of the Lewis warders.[2] Such examples might be greatly multiplied, but these are sufficient to shew the entire correspondence of the chessmen found in Lewis, both with the contemporary native costume and with other productions of Scottish art of the twelfth century, while it still remains to be shewn that such resemblance is traceable in any single undoubted Scandinavian work of the same period. The intimate intercourse between the Scandinavian and native races of the north of Scotland, and their offensive and defensive alliances already referred to, would indeed render it probable that in the twelfth century no great difference existed in their weapons or

[1] Liber Sancti de Melros, p. 76, No. 88.

[2] *Vide* Laing's Descriptive Catalogue of Ancient Scottish Seals. Nos. 283, 593, 825, 828, 843. Edin. 1850.

defensive armour. Yet we find no traces in the arms or armour of the Scottish Highlanders, with whom alone such close alliances were formed, of anything resembling those in question. In the Lothians, or Saxonia, as it is sometimes styled even in the Pictish Chronicle, it was entirely different. Before the close of the eleventh century, a mingled Saxon and Norman population occupied the old kingdom of Northumbria, a Saxon queen shared the Scottish throne, and exercised a most important influence in changing the manners of the people, and in modifying and reforming their ecclesiastical system. To this period, therefore, and from this source it is that we must look for the introduction of the military costume of the South, as well as of the minutiæ of clerical attire, which may be presumed to have previously been as little in conformity with the Roman model as the other parts of the system.

Founding on the supposed discovery of the Lewis chessmen within tide-mark, and exposed to the sea on the shores of Lewis, it has been suggested that they "formed part of the stock of an Icelandic *kaup-mann* or merchant, who carried these articles to the Hebrides or Ireland for the sake of traffic; and the ship in which they were conveyed being wrecked, these figures were swept by the waves on shore, and buried beneath the sand-bank."[1] This supposition, however, was formed under imperfect information of the circumstances attending the discovery, as they were found in a stone building, which, from the general description furnished of it, there appears reason to assume, must have been a Scottish Weem, and in the vicinity of a considerable ruin. There is greater probability in the earlier conjecture, that the carving of these ancient chessmen may have helped to relieve the monotony of cloistral seclusion. The minuteness of detail in the ecclesiastical costume is much more explicable on such a supposition than by a theory which would ascribe either to an Icelandic *kaup-mann*, or Norse carver of the twelfth century, such a knowledge of Episcopal chasuble, dalmatic, stole, cope, and tunic, as is traceable in the bishops of the Lewis chessmen.

Danish antiquaries have naturally been little inclined to dispute the idea of a Scandinavian origin assigned on such high authority to the beautiful specimens of carved chessmen found in Scotland. A keen spirit of nationality has been enlisted with the happiest effects in the cause of Northern Archæology, and however honestly bent on

[1] Archæologia, vol. xxviii. p. 290.

the discovery of truth, it was scarcely to be looked for that the Danish archæologist should search too curiously into the evidence by which such valuable relics were handed over to him. They are, accordingly, referred to in the Report of the Northern Antiquaries for 1836, under the title of Scandinavian Chessmen, and at length figure in the "Guide to Northern Archæology," among articles from the Christian Period, without its even being hinted that they were discovered, not in Denmark but in Scotland. The subject is treated more at large in the interesting paper on "Some Ancient Scandinavian Chessmen," included in the Report of the Northern Antiquaries to its British and American Members, in which several specimens found in Scandinavia are described and engraved. One of these, a female figure on horseback, supposed to be a queen-piece, (also figured in the Guide to Northern Archæology, p. 75,) is in the private collection of Professor Sjöborg. On it the writer remarks,—"The serpentine ornament upon it resembles, it will be observed, those on several of the chessmen found at Lewis. The mantle, too, or veil, hanging down the shoulders of the figure, is another point of similitude between them." A comparison of the engraving in Lord Ellesmere's translation of the Guide to Northern Archæology, with the Lewis chessmen in the British Museum, will suffice to shew how easily men are persuaded of what they wish to believe. The character both of horse and rider essentially differ; the costumes in no way resemble each other more than all female dresses necessarily do; while the horses differ as much as is well possible. In the Lewis knights their horses' manes are cut short and stand up, while the hair hangs down over their foreheads. In the Scandinavian example the mane is long, and the forehead uncovered; and what is no less worthy of note, the horse, both in this and the following examples, differs from the former in being of full size, as tested by the comparative proportions of the rider. The horse-furniture is equally dissimilar: but a still greater and more important disagreement is in the style of art. A very great resemblance may be traced

between the square forms and most characteristic details of the Lewis horses' heads, and the contemporary sculptures of Dalmeny Church, Linlithgowshire, where a series of similar heads occur in the corbel-table of the Apse. Such a comparison affords the best test of style, the peculiarities of which are more easily illustrated than described. No such resemblance could possibly be suggested by Professor Sjöborg's chesspiece; and the similarity which the Danish antiquaries discover in its serpentine ornament to those of the Lewis carvings, is little more satisfactory. The difference in style is no less obvious in two carved groups from the Christiansborg Collection at Copenhagen, (tab. vi. figs. 1, 2,) representing, the one a king and the other a queen on horseback, and surrounded each by four attendants. They are also formed of the tooth of the *Rostungr* or walrus, and are believed to be the king and queen pieces of a set of chessmen. It is sufficient to say of them that they bear equally little resemblance to the Lewis figures in arms, armour, costume, or ornamental details. In Scotland it is otherwise. Examples have been found there admitting of comparison with the Lewis chessmen. Pennant engraves one discovered in the ruins of Dunstaffnage Castle, Argyleshire, the ancient royal abode of the Dalriadic kings. It represents a king seated in a chair of square form, holding a book in the left hand. The costume differs from the kings of the Lewis sets, and obviously belongs to a somewhat later period; but the general arrangement of the figures correspond, and there can be no doubt that the latter is the king-piece of a similar set of chessmen. It is still preserved at Dunstaffnage, where it was examined by Pennant in 1772.[1]

Another of the chesspieces referred to is in the Museum of the Scottish Antiquaries, and furnishes a most beautiful example of the skill of the early carvers. It is also wrought from the walrus ivory, and may be presumed to have formed a warder or rook-piece of the set. It represents two mailed knights, armed with sword and shield, and may be ascribed to the early part of the thirteenth century. The shields are shorter than in the Lewis figures, and the devices afford an interesting means of comparison. Several of the ornamental

[1] It was exhibited at a meeting of the Society of Antiquaries of Scotland, by the late Captain Campbell of Inistore, in 1833, but I have been unsuccessful in several attempts since to ascertain in whose custody it now is, in order to obtain access to it for the purpose of making a drawing from the original.

patterns wrought on the shields of the former bear such close resemblance to heraldic distinctions that they admit of intelligible description according to rules of blazonry, yet they are all evidently mere arbitrary ornaments and not bearings; whereas on one of the shields of the latter knight we have a curious and very early example of *dimidiation* in heraldry,—a *fleur-de-lys* dimidiated on a diapered

Chesspiece, Scottish Antiquarian Museum.

field,—a figure little likely to be chosen for mere ornament. The history of this interesting relic is unknown. It was presented to the Society by Lord Macdonald in 1782, as *the handle of a Highland dirk*. From his extensive possessions in the Isle of Skye, it is not improbable that it may have been found there, where the frequent discovery of relics of different periods attests the ancient presence of a population skilled in the useful and ornamental arts. It measures three and five-eighth inches in height, and is fully equal, in point of workmanship, to any of the Lewis figures, though certainly exhibiting no characteristics which should suggest any doubt of its native workmanship.

The annexed woodcut exhibits another chesspiece, apparently of a still later date, preserved in the collection formed by Sir John Clerk at Penicuick House. Attached to it is a parchment label in the handwriting of the old Scottish Antiquary, which thus describes it: "An ancient piece of sculpture on the tooth of a whale. It was found by Jo. Adair, geographer, in the north of Scotland, anno 1682.

All the figures are remarkable." John Adair, geographer for Scotland, was appointed by the Lords of the Scottish Privy-Council, in 1682, to make a survey of the whole kingdom, and maps of the different shires. This he effected, and published the first part of his work, but, unfortunately, obstacles arising apparently from the tardy advances of the necessary funds, prevented the second part—including his voyage round the Western Isles and an account of the Roman wall—from ever appearing, and his papers, it is to be feared, no longer exist.[1] It was, no doubt, while he was engaged on this survey, that the interesting relic was discovered which is figured here. It has evidently formed a queen-piece, though consisting in all of seven figures. The queen is represented crowned, and seated on her throne, with a lap-dog on her knee, and apparently a book in her right hand. On her left is a knight in full armour, with drawn sword, and from whose costume we can have little hesitation in assigning the work to the early part of the fourteenth century. On the right hand of the throne stands a trouvere or minstrel playing on the crowde, an ancient musical instrument somewhat resembling the violin. Behind are four female figures, holding each other by the hand, and the one next to the minstrel bearing a palm-branch. This curious chesspiece is of great value, as adding another link to the chain of chronological evidence by which we trace the continuous native production of these costly relics of ancient pastime in our own country.

Queen piece, Penicuick House.

Mr. Albert Way has described two other very curious chessmen, both knight-pieces. One of these, which is preserved in the Ashmo-

[1] *Vide* Papers relative to the Geographical Description, &c. of Scotland, by John Adair, F.R.S., 1686-1723. Bannatyne Miscellany, vol. ii. p. 347.

lean Museum, is also believed to be made of the walrus tooth, and is interesting as an example of military costume, apparently belonging to the early part of the reign of Henry III. The other figure is carved in ivory, and furnishes a very minute and characteristic illustration of the military costume and horse-armour in use during the reign of Edward III.[1] But a much more remarkable relic of the same class, believed to be a queen-piece, is figured and described in the Archæological Journal.[2] It was found, about twenty years since, in the ruins of Kirkstall Abbey, and is said to bear some resemblance to another of inferior workmanship, discovered along with several chesspieces at Woodperry, Oxfordshire. One of these, a bishop, is also engraved in the Archæological Journal.[3] The form of the Kirkstall piece is further illustrated by the illuminations of a German MS. of the fourteenth century,[4] where Otho, Marquis of Brandenbourg, who died in 1298, is represented playing at chess with a lady, and with such a piece before him on the board. The details of this queen-piece are very peculiar. The four-leaved flower and triangular foliation would suggest a date not earlier than the close of the thirteenth century; nor is there anything irreconcilable with this in the very singular figures which they accompany. A parallel may be found to the most remarkable of them in the sculptural details which the exuberant fancy of that period lavished on cathedrals and shrines, without, we may suspect, always troubling themselves for the meanings which modern symbolists insist on deducing from them.

One other Scottish example of a chesspiece may be mentioned. It is a small mutilated ivory figure, apparently of a king, in classic costume, and with a drawn sword in his hand, found a few years since among the ruins of North-Berwick Abbey. But it belongs to a much more recent period than any of those previously referred to, and is inferior to them as a work of art. Were it not, indeed, for the Scandinavian origin so generally assigned to nearly all the early examples of British chessmen, their manifest classification among the productions of Christian art would have rendered it more consistent with an orderly system of chronology to treat of them along with late medieval antiquities. The "Collection of Inventories of the Royal Wardrobe and Jewel House," among its many curious items, furnishes this interesting notice of the tables and chessmen of James IV., and

[1] Archæol. Journal, vol. iii. pp. 243, 244.
[2] Archæol. Journal, vol. vi. p. 170.
[3] Archæol. Journal, vol. iii. p. 121.
[4] Bibl. Du Roi, No. 7266. Ibid. vol. vi.

possibly of older Scottish kings:—"Ane pair of tabillis of silvir, our-gilt with gold, indentit with jasp and cristallyne, with table men and chess men of jasp and cristallyne."[1] The entry sufficiently shews the familiarity of the Scottish court with the use both of table and chess-men at the date of its record, in the reign of James V., A.D. 1539. But evidence is hardly needed to prove the knowledge of a pastime which was then a favourite in every European court. The tables and chessmen are entered among the royal jewels, and unfortunately their costly materials, which admitted of such a classification, render it vain to hope that they may still be in existence, like the older but more homely chessmen of Charlemagne.

[1] Collection of Inventories, p. 49.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

CHAPTER VI.

PRIMITIVE ECCLESIOLOGY.

With the introduction of Christianity into Britain an entirely new era of art begins, derivable here, as elsewhere, from the central heart of ancient Christendom, as in the celebrated example of the Candida Casa, built at Whithern, in Galloway, in the Roman style.

We have the authority of Bede for the fact already referred to,—that the first churches of the Britons were constructed of timber. The cathedral of St. Asaph, founded by St. Kentigern in the sixth century, was a wooden church, after the manner of the Britons, and so also we may believe was the first cathedral of Glasgow, the work of the same founder. The first cathedral of the Isles seems not even to have aspired to the dignity of a wooden church, but to have been only a wattled inclosure, not unsuited to the simplicity of the primitive apostle of the Picts. Similar erections were probably employed at a much later period, for the temporary accommodation of the first phalanx of the newly founded monastery. A very curious seal, attached to one of the older charters of Holyrood Abbey, represents a structure so entirely differing from all the usual devices of the earliest ecclesiastical seals, that I am strongly inclined to look

upon it as an attempt to represent the original wooden church, reared by the brethren of the Holyrood Abbey, on their first clearance in the forest of Drumselch. It manifestly represents a timber structure. The round tower is also curiously consistent with the older Scottish style, which the Romanesque was then remodelling or superseding, but bears no analogy to that of the Abbey of St. David. The contemporary seal of St. Andrews, which has for its device the venerable metropolitan church of St. Rule, proves that such portraiture was actually attempted and successfully practised at the period.[1] Viewed in this light the old Holyrood seal is one of the most interesting ecclesiological relics we possess, figuring, it may be, the primitive structure first reared on the site which is now associated with so many of the most momentous occurrences both in the ecclesiastical and civil history of Scotland. The earliest charter to which it has yet been found attached is a notification by Alwyn, Abbot of Holyrood, A.D. 1141; but both the style of workmanship and the curiously mixed lettering manifestly belong to an earlier period, when the *mos Scotorum* was still in use, and perhaps point to the existence of a *familia*, or Christian community established in the glades of Drumselch Forest, long before the royal foundation of the Holyrood. Amid such primitive structures, the Candida Casa of St. Ninian must have stood forth as a majestic example of Italian art, and have furnished a model which succeeding builders would strive to imitate. Yet as each country of Christian Europe has its own peculiar variations from the theoretical standard, or its provincialisms, as they may be fitly enough called, so Scotland and Ireland, occupying originally a more isolated position than the other kingdoms of Christendom, modified these to a remarkable extent, and produced a style differing so greatly from the Italian model as to confound the speculations of modern ecclesiologists. The masterly essay of Dr. Petrie on "The Round Towers of Ireland," has at length freed this inquiry from the cumbrous theories of older antiquaries, and given consistency to the archæological records of native art.

While England has her Anglo-Saxon ecclesiastical remains, exhibiting more or less of the transition by which the debased Roman passed into the pure Romanesque, or Norman style, Scotland, along with Ireland, possesses examples of an early native style belonging to the same period, anterior to the Norman invasion, and distinguished

[1] Laing's Ancient Scottish Seals, Nos. 1103, 1105, 1106.

by more marked and clearly defined characteristics. The peculiarities of the early masonry have generally been selected by judicious ecclesiologists as one of the most unerring guides to genuine Saxon remains, including such constructive features as the varieties of *long and short work*, whether introduced plainly in the angles of the buildings, or in the form of pilaster-strips, panels, arcades, and other decorations on the surface of the walls, as in the celebrated Earl's Barton Tower, Northamptonshire, and in Stanton Lacy Church, Shropshire. The latter are only modifications of the simpler long and short work, and are obviously introduced for the same purpose, namely, to supply the want of a sufficiency of good building materials, and to bind together the unsubstantial ruble-work between, much in the same way as beams and brick-work are united in a timber-framed house. This difficulty of obtaining a sufficient supply of stone accounts for the introduction of herring-bone work, consisting of courses of bricks or tiles of Roman shape, and not unfrequently the spoils of older Roman buildings, disposed in alternate chevron rows. Such evidence is not of course in itself sufficient to fix a building as undoubtedly belonging to the Anglo-Saxon period, but as it generally occurs along with features more or less markedly distinct from the earliest Romanesque buildings to which an authentic date is assigned, it is a mere disputing about terms to question the existence of many well known examples in England of a style of ecclesiastical building popularly known as Saxon architecture. In addition to these constructive features there are not wanting peculiarities of detail, such as the belfry windows, divided with a rude baluster, or a slender cylindrical shaft carrying a long impost without any capital, and small apertures both in doors and windows, formed by two or more stones laid so as to form a straight slope, and producing a class of pointed openings coeval with the earliest circular arch in our ecclesiastical architecture. Sculptured decoration is rare, and generally extremely rude. The imposts of arches most frequently present imperfect imitations of Roman mouldings, where they are not simple square blocks, though in some instances a modification of the long and short work, consisting of ragstone regularly disposed in imitation of carved mouldings, serves as an economical substitute for more laboured decorations.

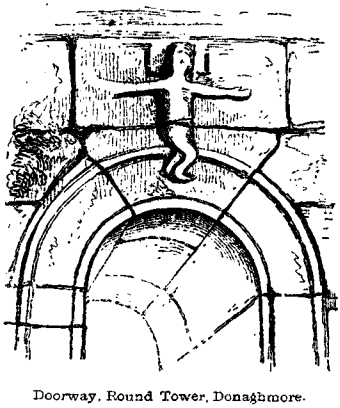
Most of these characteristics of Anglo-Saxon architecture are, in the true sense of the word, provincialisms, not indeed necessarily confined to England, but pertaining to the earliest buildings of dis-

tricts where good stone is scarce, and not easily procured. They form interesting examples of the legitimate origin of architectural details from the necessities of the locality in which they are found. On this very account, however, they are such as we should not expect to find, either in Scotland or Ireland, where substantial building materials abound. Examples, indeed, of analogous workmanship are not wanting in either country, and some of those of Scotland will be referred to. The celebrated ruin of St. Anthony's Chapel, near Edinburgh, though certainly not earlier than the fourteenth, and more probably belonging to the fifteenth century, affords a curious instance of the adaptation of the rude materials of its immediate site, where others of the best quality were of easy access. This, however, is a solitary example, and no indication of a prevalent custom. Any evidence of such an exotic style as that usually called Saxon in the south of England transplanted to these localities, like the Scoto-Roman masonry already described, would clearly point to a foreign origin, and to builders unfamiliar with the facilities of a stone country.

The peculiar characteristics of the later ecclesiastical revolutions of Scotland, which almost entirely eradicated all veneration for the historical memorials of the ancient Scottish Church, have largely contributed to obliterate the evidences of our primitive Christian architecture. Some few examples of singular value, however, exist to attest the correspondence of the earliest sacred structures with other contemporary works of art. Scotland, as well as Ireland, has still her round towers, among the earliest and most interesting relics of native ecclesiastical architecture. Into the endless controversy of which these have formed the subject it is happily no longer needful to enter. Dr. Petrie's admirable work has sufficed to sweep away the learned dust and cobwebs laboriously accumulated about the inquiry into their origin, and exhibits the value of patient investigation and the logical deductions of a thoroughly informed mind, in contrast to the vague and visionary speculations of the fireside student. The field which the Scottish antiquary has to investigate is narrow indeed when compared with that which Ireland offers; but is on that very account freed from some of the difficulties which beset the explorer into the corresponding Irish examples of the architectural taste and skill of a remote and long unknown period. It is even possible that a closer investigation of the history of the round towers of Scotland may throw some additional light on those of the sister isle.

It is with extreme hesitation that I venture to hint a doubt in regard to any of the conclusions arrived at in the "Ecclesiastical Architecture of Ireland anterior to the Anglo-Norman Invasion," regarding it, as I do, as a nearly perfect model of critical analysis and research. Yet even Dr. Petrie occasionally seems not to have entirely escaped the influence of that temptation to assign the remotest conceivable antiquity to these national monuments, which proved so effectual a stumblingblock to his predecessors. Notwithstanding the evidence adduced for the date assigned to the erection of the Round Tower of Kildare, it is impossible to overlook the fact, that the doorways both of that and of the tower at Timahoe are decorated with ornaments and mouldings, which, though not without their own peculiar details, essentially correspond to those found throughout Europe on works of the eleventh and twelfth centuries. If the record of erection at a particular date, with the absence of any notice of rebuilding, were to be accepted in proof of the date of styles, there is probably no single phase of medieval ecclesiastical architecture which might not be proved on such evidence to be coeval with the earliest. The silence of all authorities as to the re-erection of churches once built is a species of negative proof of the smallest possible value. In the ruined nave of Holyrood Abbey at Edinburgh, the experienced eye may detect work of nearly every period from the twelfth to the seventeenth century; yet in some places the mouldings of the fourteenth and fifteenth centuries are so ingeniously engrafted on the original Romanesque work, that it is hardly possible precisely to define the amount of change. The ingenuity with which the old masons have thus remodelled churches to bring them into correspondence with the progressive developments of pointed architecture, completely baffles the attempt to fix from single examples, such as the remarkable doorway of Timahoe, the work of a precise date. The form of arch, the chevron mouldings, decorated capitals, the sculptures on the imposts, are all such as the experienced eye would assign to the era of the Romanesque or Anglo-Norman style; and this idea is rather strengthened than weakened by the finely-jointed character of the ashlar-work, as such well-finished masonry is rarely met with in any English edifice prior to the twelfth century. The well-known details common to the Romanesque style are undoubtedly accompanied, as might be expected, by others peculiar to Ireland; but these examples referred to do not differ more from any twelfth century building in England or

Scotland than does the beautiful stone-roofed Church of Cormac, on the Rock of Cashel, to which Dr. Petrie assigns, on indisputable evidence, the date of 1134. I am induced to direct attention to these points—otherwise foreign to the subject in hand—because the few marked characteristics which can be referred to on the round towers of Scotland correspond with those in Ireland which, according to all received ecclesiological analogies, seem to indicate an earlier date than the towers of Timahoe or Kildare, or the presumed contemporary monastery of Rathairn, and can hardly be supposed to be works of a later period. On this point I find it difficult to follow Dr. Petrie, who assigns to these specimens of ecclesiastical architecture, marked by details corresponding with works of the eleventh and twelfth centuries in England and Scotland, a date not later than the close of the eighth century, while the tower of Donaghmore, which bears considerable resemblance to the Scottish round tower at Brechin—though greatly inferior in the amount or richness of ornament—is ascribed to the early part of the tenth century, or fully a century prior to the date of the corresponding Scottish building. Yet there are also points of resemblance of a sufficiently marked character, both in the peculiar masonry and details of the Timahoe and Brechin Towers. The pellet and bead moulding on the soffit of the former also very closely corresponds with the finish of the architrave in the Scottish doorway, though their decorations otherwise greatly differ.



Doorway, Round Tower, Donaghmore.

The well-known round towers of Scotland are those of Abernethy and Brechin; but in addition to these we have the ancient church and tower of St. Magnus, Egilshay, in Orkney, which, though hitherto generally overlooked from its remote and inaccessible position, is no less interesting and worthy of note. The little church of St. Magnus, on the island of Egilshay, still remains in tolerably perfect condition though roofless, consisting of a chancel, nave, and round tower at its west end, which appears, when perfect, to have been between fifty and sixty feet high. It was roofed with an irregular dome-shaped capping, and both the nave and chancel were also protected, at no very

distant period, with a roofing of stone. Dr. Hibbert, in his "Description of the Shetland Isles," refers to this little Orkney edifice as a specimen of the ancient Scandinavian Church, corresponding, as he conceives, to others which formerly existed in Shetland. After describing Burra, St. Ronan's, and other localities in the Bay of Scalloway, he goes on to remark,—"On an adjacent promontory, named Ireland, once stood a church which was adorned with a lofty steeple. But of three buildings of this kind situated in Ireland, Burra, and Tingwall, that were said to have been erected by Norwegian sisters, it is unfortunate that not one should now remain."[1] It is in illustration of the presumed appearance of these that the church of Egilshay is referred to as "a small religious edifice in Orkney, which these kirks of Shetland are said to have much resembled."

The date of these churches, which tradition thus assigns to Norwegian builders, is not known. If, however, we were to take the dedication of the one still remaining on the island of Egilshay as a clue to the whole, we should be compelled to assign them to a comparatively recent period, and one later by more than a century than the most modern of the round towers of the mainland.

According to well-known Scandinavian records, the introduction of Christianity into the Orkney Islands was effected by the Norwegian king Olaf Trigvason, better known to us as St. Olaf, on his return from an expedition to Ireland in the year 998, having himself received baptism not long before in the Scilly isles. This important change, however, which the warrior missionary characteristically effected at the edge of the sword, there is good reason for believing only affected the Norwegian jarls. Christianity, as has been already shewn, had long preceded the conquest of these islands by the Northmen. The missionaries of Iona had not been so effectually scared by the intrusion of these fierce invaders as to abandon the numerous scenes of their early labours; and it is entirely consistent, both with the history of the northern islands and the characteristics of the primitive little edifice referred to, to believe that the church which still stands, though in ruin, on the island of Egilshay was the scene of Christian rites, amid "the storm-swept Orcades," when the rude Norse king landed his strange missionary crew on the neighbouring isle.

It can hardly admit of doubt that the simple little church and tower of St. Magnus, Egilshay, were built from Irish models. Even if

[1] Hibbert's Shetland, p. 457.

its origin were satisfactorily traced to Norwegian founders, the frequent expeditions of the Northmen to Ireland would suffice to account for this. St. Olaf visited Ireland before his memorable visit to the Orkneys, on his way to Norway, bent on introducing the new faith into his own country. Sigurd, the Jarl whom he converted by the summary alternative of embracing Christianity or forfeiting his dominions, fell in the great battle of Clontarf, in Ireland, A.D. 1014, in which Danes and Northmen of Northumberland, the Orkneys, Hebrides, and Man, fought along with other foreign auxiliaries, on behalf of the Danish colonists of Ireland, against the famous Irish monarch, Brian Boru, while among his allies were the Scottish Maormors of Lennox and Marr. Gray's celebrated ode of "The Fatal Sisters" is a paraphrase of an ancient poem in the Icelandic Saga, on the battle in which the Northmen suffered so terrible a defeat. In this contemporary poem, Hilda, the Scandinavian goddess of war and victory, is introduced with her weird-sisters, the Valkyries, who attended on the field of slaughter to convey the spirits of the dying heroes to the hall of Odin, and otherwise received in the Scandinavian mythology nearly the same attributes as the *Parcæ* of the Greeks. These Scandinavian Fates are represented as having been seen at Caithness, in Scotland, by a man named Darraudar, on the very day of the battle of Clontarf. They were on horseback, riding swiftly towards a hill, into which they entered, and on looking through an opening of the rock he saw twelve gigantic females weaving a web at a strange loom. Their shuttles were weapons of war, their warp was weighted with human heads, and they wove with human entrails the ghastly texture of "the loom of hell." As they plied their shuttles they sang a dreadful incantation, on finishing which they tore the web into twelve pieces, and each taking her portion they mounted their black steeds and rode off, six to the north and six to the south. That same day they appeared on the field of Clontarf busied amid the heaps of the slain. Such was the creed of the Norse Jarls sixteen years after the conversion of Sigurd of Orkney by St. Olaf, and the sole fruit of their last visit to Ireland. It is not to them, therefore, that we must look for the introduction of the models of the first Christian churches of Orkney. It is much more probable that the earlier missionaries of St. Columba were themselves the architects of the humble little fane which remains on the island of Egilshay, as well as, of many others that once adorned the neighbouring isles.

It closely corresponds in general characteristics with Dr. Hibbert's account of the ancient churches of Shetland, of which traces still exist. "All the ecclesiastical buildings," he remarks, "appear to have been devoid of the least show and ornament, the ingenuity of the architect extending little farther than in constructing a round vaulted roof. The pointed arch, the pinnacled buttresses, or rich stone canopy, never dignified the chapels of humble Hialtland. The number of them, however, was remarkably great. The parish of Yell, for instance, boasted twenty chapels, where only two or three are used at the present day."[1] The venerable little Church of Egilshay has fallen into like decay, and the inhabitants are now compelled to seek a place of worship on a neighbouring island.

Like other Orkney buildings of very different dates, this primitive church is constructed almost entirely of the unhewn clay-slate of the district. The tower is unsymmetrical, tapering somewhat irregularly towards the top, and bulging considerably on the side attached to the church. It differs from other examples in having no external doorway. It has evidently been built contemporaneously with the

St. Magnus's Church, Egilshay.

church, and is entered from the nave by means of a door through the west wall. The accompanying view from the south-east will help to convey some idea of its external appearance. Since the view engraved in Dr. Hibbert's Plate of Antiquities was drawn, the stone roofs both of the church and tower have disappeared, along with a portion of the walls of the latter, which was taken down from the ap-

[1] Hibbert's Shetland, p. 530.

prehended danger of its falling. The following are the proportions of the church and tower. The greatest circumference of the tower is forty-eight feet, and its present height about forty-five feet. There is no appearance of any stair having been constructed in it, but two beams of oak near the top, and two lower down, still indicate the arrangement of the floors by which it has at one time been subdivided. Directly above the door on the eastern side, connecting it with the nave, are the only two windows in the tower, one above the other, arched with unhewn stone. The doorway is only four feet in height from the present floor, and two feet four inches broad. The walls of the nave are about three feet thick, and it measures thirty feet long by sixteen feet wide within the walls. It is entered both on the north and south sides by doorways constructed "*more Romano*," with a plain semicircular arch of unhewn stone. On the north side there is but one small arched window, three feet three inches in height, and only nine inches wide; while on the south side, in addition to a corresponding window of similar size, there are two other plain square-headed windows, measuring respectively two feet eleven inches by one foot two inches, and one foot nine inches by one foot one inch. The chancel is still covered in with a plain semicircular arch, above which has been a chamber, constructed between it and the outer covering of stone, and accessible only by an entrance over the chancel arch, where in all probability was kept the muniment chest of the officiating priest. Such an arrangement is traceable in early Irish churches, as in the original work of the beautiful church at Rathain, in King's county, which Dr. Petrie assigns as the work of St. Fidhairle Ua Suanaigh, who died in 763.[1] The chancel measures within the walls eleven feet by nine feet seven inches, and is lighted only by a small window in the north and south walls, measuring each twenty by eleven inches. But perhaps the most singular feature of this interesting structure is the chancel arch, which, directly contrary to those of corresponding edifices in Ireland, has its sides inclined inward towards the base, so as to present a complete horse-shoe arch. It is scarcely possible to examine the details of this most interesting relic of early Christian art, without recognising its manifest correspondence with the primitive Irish churches of the sixth and seventh centuries, which Dr. Petrie's researches have rendered so familiar to us.

[1] Ecclesiastical Architecture of Ireland, 8vo, pp. 242, 245.

That the little Church of Egilshay existed long prior to the era of St. Magnus cannot, I conceive, admit of doubt. A comparison of it with the stately cathedral of Kirkwall, founded little more than thirty years after the death of the sainted Earl, is alone sufficient to prove its erection at a period essentially differing from the era of the fully developed Romanesque. Its later dedication to that favourite northern saint is abundantly accounted for by the remarkable historical fact that in its immediate neighbourhood, if not indeed, as the Aberdeen Breviary states, within this venerable fane, the gentle Magnus Erlendson was hewn down by his fierce cousin Hacon, A.D. 1106. It affords additional confirmation of the source of the Christianity of the Northern Isles, that we are told in the same venerable Scottish ecclesiastical authority, that Magnus commended his soul to the Redeemer, to St. Mary, and to the old northern apostles, *St. Palladius* and *St. Serf*. The fame of the sanctity of the martyred Earl of Orkney was speedily attested, according to the faith of the period, by numerous miracles wrought at his tomb. Pilgrimages were made to his shrine, and saintly honours accorded to him, not in Orkney only, but throughout Norway, Sweden, Denmark, Iceland, and the Scottish mainland. Within twenty years after his death the legendary incidents of his life had been woven into an Icelandic Saga, strangely differing from that of Hilda and her attendant Valkyries. Ronald, the nephew of the martyred Earl, obtained a grant from the King of Norway of the possessions which were his by right of succession to his uncle, and on successfully establishing his claims the cathedral of St. Magnus at Kirkwall was begun in or about the year 1138, in fulfilment of a vow he had made while fortune still hung doubtful in the scale.

The reputation of the sainted Earl has outlived that of any other Scottish saint, if we except the good St. Margaret. His name is still spoken with reverence throughout Orkney and Shetland, independently of all idea of saintship or martyrdom, to which indeed his claims are greatly more doubtful than his just title to the character of an upright ruler in a barbarous age. He died in a private quarrel with his own cousin, in which no other questions than those of mutual interest appear to have been involved. But the Church availed itself of the reverence which his virtues had inspired; and to this it is no doubt mainly owing that, notwithstanding the extreme veneration in which his name was held, little trustworthy information is to be found regarding him, even in the authorized records of hagiology.

The Aberdeen Breviary styles him "the Apostle of Orkney and the Hebrides." Other old authorities refer to him as a bishop or missionary to the Pagans of the north; and a writer in the first Statistical Accounts[1] winds up a sufficiently amusing attempt at tracing his history, by shewing the great probability that he was a knight templar!

The characteristics of the majestic cathedral of the Northern Isles furnish valuable elements of comparison with other examples of early ecclesiastical architecture in Scotland; while they completely confirm the great antiquity of the simple edifice which was deserted as the see of the Orkney bishops for the stately edifice at Kirkwall dedicated to the sainted Earl of the Orkneys. If we except the one common feature of the rounded arch, no elements of comparison exist. The cathedral is a well-defined example of the late Romanesque style, bearing no traces of the rudeness or imperfection which might be looked for in the transition from an humble and homely fane to one of such pretensions, but distinctly marked as belonging to a later period than Dunfermline, Kelso, and other of the older Scottish abbeys in the same style.

Returning to the consideration of the round towers of the Scottish mainland, the reader will probably be prepared by the previous evidences of the close affinity traceable between the early Irish and Scottish arts to assume that these erections, which find a parallel only in Ireland, are either the work of the Irish Scots or the result of the intimate intercourse with Ireland which was maintained at a well-ascertained period of our history. When we consider the close resemblance between the round towers of Brechin and Abernethy, and many of those of Ireland, amounting to a complete identity of style, it seems strange that Scottish antiquaries should have hesitated in ascribing to the former a Christian origin, after the obscure annals of the Dalriadic Scots had been cleared up. From these, as we have already seen, the Irish Scoti had no footing beyond their little territory in Argyleshire till the middle of the ninth century; and we have unquestionable evidence that the Romanesque or Anglo-Norman style had obtained general acceptance in Scotland in the very beginning of the twelfth century. Between these two periods, therefore, must the precise date of erection of both the round towers of Brechin and Abernethy be sought. But this interval is further greatly limited by

[1] Sinclair's Statistical Account, vol. xix. p. 44.

the establishment of the third Norwegian kingdom by Thorfinn in 1034. It embraced nearly the whole of the north of Scotland, and was successfully maintained for thirty years, so that we are almost unavoidably compelled to assume their date as prior to this earlier period. The triumph of Thorfinn involved the extinction of the house of Kenneth MacAlpin, and the extermination of the most powerful chiefs of the Scottish race. By this we are limited to a period somewhat short of two centuries, within which it may be assumed that the Scottish round towers were erected; and with this such historical evidence as we possess in some degree accords. Neither of them, however, are the primitive structures reared on these long sacred sites. The tower of Abernethy, which stands solitary and unroofed, with all the ancient ecclesiastical adjuncts of a collegiate foundation utterly effaced, may be very briefly dismissed. Gordon[1] gives its dimensions as follows: Its elevation is seventy-five feet, wanting the conical roof which we may assume to have originally crowned its summit, adding ten or twelve feet to the height. The doorway which faces the north, and is, as usual, elevated several feet from the ground, is eight and a half feet high, by two and a half feet wide, and consists of a plain semicircular-headed opening. The tower now occupies an angle of the inclosed churchyard, and serves both as a belfry and clock-tower for the plain modern church; in addition to which the obsolete iron jougs still attached to it shew that it was also enlisted in older times in the execution of ecclesiastical discipline.

The Pictish Chronicle records the founding of a church at Abernethy, by Necton, King of the Picts, who reigned about the year 455. He dedicated the royal foundation to God and to St. Brigid, and endowed it with lands, *usque ad diem judicii*, the boundaries of which are minutely specified, "from the stone at Apurfeirt to the stone near Cairfuill," &c.,—an interesting example of the Hoare Stones or landmarks of the fifth century. This is further confirmed by Fordun,[2] who quotes an ancient chronicle of Abernethy in corroboration of the earlier record. Of the precise character of this *ecclesia collegiata de Abernethy* of the fifth century, it is now vain to speculate, but most probably, even for some centuries later, it was only a wooden church after the manner of the Britons, and so remained until about A.D. 711, when we learn from Bede of a second Naiton or Necton, King of the Picts, who sent messengers to the venerable Ceolfrid, abbot of the

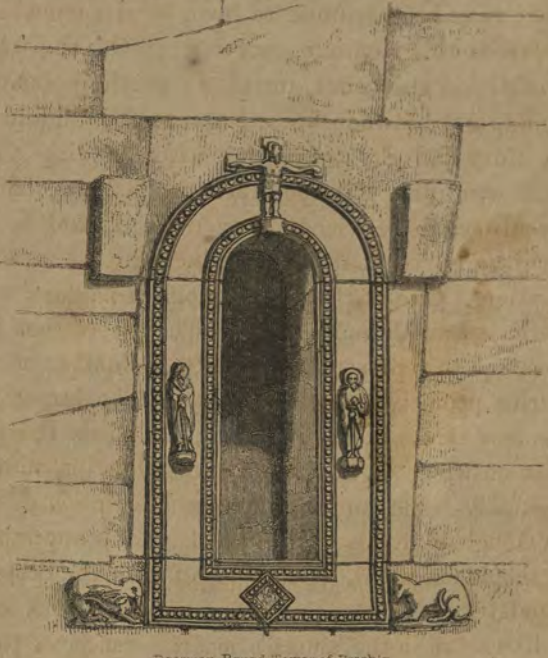
[1] Itinerar. Septent., p. 164. [2] Fordun, vol. iv. p. 12.

historian's own monastery of Jarrow, at the mouth of the Wear, inquiring concerning sundry disputed questions, and praying him to send architects who, according to the manner of the Romans, should make a church of stone among his people. The Pictish monarch qualifies a promise of future obedience to the holy Roman and Apostolic Church thus naively: "In quantum dumtaxat tam longe a Romanorum loquela et natione consegregati hunc ediscere potuissent."[1] At what time the royal foundation of Abernethy was remodelled, according to the fashion indicated by its ancient tower, is not recorded in any authority that I know of, but it may not improbably be found noted by some of the Irish annalists from whom Dr. Petrie has already recovered so large an amount of well-authenticated history. The interest in it has naturally been greatly diminished by the annihilation of every vestige of the collegiate buildings except the tower. Its masonry, however, closely corresponds to that of Brechin, while the character of its upper windows is suggestive of even a more recent period, and it is probable that they are additions of a later date than the original structure.

The ecclesiastical foundation of Brechin, so far as we know, is fully four centuries later than that of Abernethy, and belongs to the era of the kings of the Scottish race. The ancient Pictish Chronicle concludes in the reign of Kenneth, the son of Malcolm, 967-991, and is supposed to have been written at that early period. It sums up the brief record of his reign in these words: "This is he who gave the great city of Brechin to the Lord." It does not perhaps necessarily follow that no earlier church existed at Brechin; but to this period we may assign, on the authority of the ancient Chronicle, the first royal foundation; and in the absence of other evidence, I should have felt little hesitation in fixing it as the period when the present round tower was built. Dr. Petrie, however, assigns a date about thirty years later, and promises more precise information derived from the Irish annalists, from whence we may hope for other valuable additions to the *Annales Scotorum*. Meanwhile, we have obtained an approximation to the desired date, concerning which the indefatigable investigator of the history of these peculiar structures only remarks, "The round tower of Brechin in Scotland there is every reason to believe was erected about the year 1020, and by Irish ecclesiastics."[2] In dimensions this ancient structure somewhat exceeds that of Aber-

[1] Bede, L. 5, c. 21. [2] Ecclesiastical Architecture of Ireland, &c., 8vo, p. 410.

nethy, measuring eighty-five feet to the cornice,[1] above which a roof or spire of later date has been added when the cathedral church was re-erected in the thirteenth century. In every other respect it offers superior attractions to that of Abernethy, surrounded as it is with the more recent yet venerable and characteristic memorials of ancient ecclesiastical art, and adorned with sculptures of a singular and very remarkable character. The masonry of the tower, as will be seen from the drawing of the doorway, is of that kind which has been traced as gradually arising out of the cyclopean work of ancient Greece. The



Doorway, Round Tower of Brechin.

stones are polygonal, carefully hewn, and fitted to each other with the utmost neatness and art; the courses of masonry being mostly horizontal, though with more or less irregularity, and the joints not uniformly vertical. It is the same style of work which characterizes the walls of the ancient cities of Etruria, and is also found in Ireland to have succeeded to the ruder primitive cyclopean masonry. But the

[1] Itiner. Septent., p. 165. Pennant says, height from ground to roof eighty feet, and, including the spire, one hundred and three feet.—Tour, vol. iii. p. 162.

peculiar feature of the Brechin Tower is its sculptured doorway. Its dimensions are as follows: The breadth at the spring of the arch is one foot seven and a half inches, and at the base one foot eleven inches. The height of the entrance to the centre of the arch is six feet one and a half inch, and the entire height of the doorway from the base of the external ornament to the summit of the crucifix which surmounts the centre of the arch, is eight feet eleven and a half inches.[1]

The sculptured figures cut in relief on the imposts and at the base of the doorway, are unhappily too much defaced to admit of a very distinct idea being now formed of their original appearance. Mr. Gough, who examined and made drawings of them eighty years since, when they may be presumed to have been somewhat more perfect, thus describes this ancient doorway: "On the west front are two arches, one within the other, in relief; on the point of the outermost is a crucifix, and between both, towards the middle, are figures of the Virgin Mary and St. John, the latter holding a cup with a lamb."[2] But it was unhappily too much the fashion with antiquaries of the last century, to see what they desired, and to make their drawings accordingly, so that little value can be attached to this precise description. One of the figures holds a pastoral staff, and the other may perhaps have borne a mitre. They were, not improbably, originally designed to represent St. Serf, St. Columba, or some other of the favourite primitive Scottish saints. The larger of the two measures one foot eleven inches in height, including the pedestal or block of stone on which it stands. The nondescript animals below no less effectually baffle any attempts at description. "If one of them," says Gough, "by his proboscis had not the appearance of an elephant, I should suppose them the supporters of the Scotch arms!" Pennant, undeterred by the *proboscis*,—which, indeed, even now looks more like a fish in the animal's mouth,—conceives them more probably to be the Caledonian bear and boar. The lapse of eighty years has not added to their distinctness, and little good can be hoped for from such random guessings. But the two upper blocks supply curious and unmistakable evidence of the fact, that the original design of the old sculptor has been abruptly brought to a close. Additional figures—not improbably ministering angels—have mani-

[1] The drawing of the Brechin doorway is carefully made to scale, and the measurements have been taken for me by an experienced practical builder, so that they may be relied upon for accuracy.

[2] Archæologia, vol. ii. p. 85, Plate v.

festly been intended to be introduced on either side of the crucified Redeemer, but from some cause—possibly yet ascertainable from the Irish annalists—the work of decoration has been arrested, and the unshapen blocks have been left to be fashioned by the tooth of time.

To these few examples of ecclesiastical buildings belonging to a period prior to the development of the architecture of Medieval Europe, I have little doubt that further research, particularly in the Hebrides and the neighbouring coasts of the mainland, may still supply some interesting additions. This volume has been delayed in the hope of being able to accomplish a tour sketched out for that purpose, but the plan must be executed at a future time, and most probably by other investigators, who possess all the requisites for its efficient accomplishment. It is exceedingly likely that some of the primitive oratories of the first centuries of Scottish Christianity still exist on the remote sites frequently chosen by the ascetic missionaries of the faith. Martin, for example, after describing the Eird Houses or Weems of the Western Isles, adds,—"There are several little stone-houses built above ground, capable only of one person, and round in form; one of them is to be seen in Portry, another at Linero, and at Culunock. They are called *Tey-nin-druinich, i.e.*, Druid's House."[1] Again, the Old Account of the Parish of Orphir, in Orkney, furnishes the following description:—"In the churchyard are the remains of an ancient building, called the Girth House, to which great antiquity is ascribed. It is a rotundo eighteen feet in diameter, and twenty feet high, open at top; and on the east side is a vaulted concavity, where probably the altar stood, with a slit in the wall to admit the light; two-thirds of it have been taken down to repair the parish church. The walls are thick, and consist of stones, strongly cemented with lime. From its resemblance to the Pantheon, some have ascribed this building to the Romans; but in all probability it has been a chapel, dedicated by the piety of its founder to some favourite saint."[2] These seem, like the more celebrated Arthur's Oon, to answer in description to the small circular structures familiar to Irish antiquaries as bee-hive houses, and which are believed to have been the abodes of ancient ecclesiastics. Even on Arthur Seat, exposed to the restless populace of the neighbouring city, some remains of the simple cell of the Hermit of St. Anthony are still visible, and on the Island of

[1] Martin's Western Isles, p. 154.

[2] Sinclair's Stat. Acc. vol. xix. p. 417.

Inchcolm, in the Frith of Forth, a rudely arched little vault, of uncertain age and sufficiently primitive construction, adjoining the ruined monastery over which the historian, Abbot Bowar, presided, is shewn as the cell of the good Hermit of St. Columba, where he entertained King Alexander I. for three days, when driven on the island by a tempest. The adjacent monastic buildings still include remains of various early dates, some of which will come under review in the following chapter; but an interesting memorial of the original monastery has been preserved on the chapter seal, which—like some of those of the metropolitan see figured with the primitive Cathedral of St. Rule—is engraved with a view of the ancient Abbey Church of Inchcolm. In style of art the seal bears considerable resemblance to those of St. Andrews. The church is represented consisting of nave and choir, with a central tower surmounted by a spire, and with plain round-headed windows in the choir. The only impressions yet discovered are very imperfect; but little doubt can be entertained that in these we have a representation of the original structure of the twelfth century, fully as accurate and trustworthy as we are enabled to ascertain the ancient seals of St. Andrews to have been. Thus does wax and parchment outlive the graven brass and the masonry which seemed to bid defiance to time.

CHAPTER VII.

MEDIEVAL ECCLESIOLOGY.

THE subject of Medieval Ecclesiology is much too comprehensive to be treated with attention proportionate to its extent, and the importance justly ascribed to it, in the compass of a single chapter. But some notice of it is indispensable to the completeness of any systematic treatise on Scottish antiquities; and in attempting this it becomes once more necessary to glance at the ethnological elements on which depend the transition from the earlier and simpler characteristics already noticed. Whatever value be attached to the attempts advanced in the previous chapter to give some precision to the history of Primitive Scottish Ecclesiology, little doubt can now be entertained that throughout the whole period of Celtic rule in Scotland and Ireland, a peculiar character pervaded the native arts, and greatly modified the forms of Christian architecture introduced from Italy along with the new faith. Long, however, before Thorfinn subjected the Celtic population of the north to the Norwegian yoke, and sanctioned Macbeth's usurpation of the throne of the Southern Picts, the Teutonic races from the south were securing a footing in the Lothians. From the middle of the seventh century the limits of the kingdom of Northumbria extended to the Forth, and though the Angles maintained their varying northern frontier only by a constant warfare with the Picts and Scots, yet the population must have become almost entirely Teutonic before the recognition of Egbert of Wessex as bretwalda or chief ruler of England, in 829. In 867, the Danes, a different branch of the Scandinavian race from the old Scottish Northmen, conquered the kingdom of Northumbria, and it is not till

after the accession of the Saxon Athelstane, in 925, that we again find it partially and temporarily incorporated with the southern kingdoms. With these portions of English history we have little further to do than simply to note the evidence they furnish of the same remarkable changes having affected the population of the Scottish Lowlands which divided the races of the south into Weals and Engle-kin, or Celtic and Teutonic; Jutes, Angles, and Saxons, being comprehended from a very early period under the common name of Englen or English. The changes which followed on the Danish conquest again temporarily isolated Northumbria, where Harold Harefoot established a separate kingdom; and when Macbeth secured the concurrence of Thorfinn in his accession to Duncan's throne, he included in his dominions a large portion of the Scottish Northumbria. To this succeeded the accession of Malcolm Canmore, Duncan's eldest son, a prince of the old Celtic race, but sharing also through his mother in the Anglo-Saxon blood, educated at the Court of Edward the Confessor, and restored to the throne of his fathers chiefly by the aid of the Northumbrian Saxons.

The establishment of Malcolm on the Scottish throne dates from the year 1058; but four years prior to this he had succeeded, with the aid of his uncle, Siward, Earl of Northumberland, and a Saxon army, in driving Macbeth beyond the Forth, notwithstanding the strenuous aid of the Northmen, with whom a large portion of the native Celtic race were then closely allied. From this important epoch in our national history dates the commencement of that remarkable revolution known by the name of the "Saxon Conquest." The Norman triumph at Hastings greatly accelerated its progress. Already the Scottish Court was the resort of numerous Anglo-Saxon nobles and leaders, whose services had given them claims on the Scottish Crown, and whose retainers accompanied them to settle on their new possessions in the Scottish Lowlands. But the Norman invasion drove many more to seek from the northern ruler the shelter which he had found in his adversity at the English Court; nor must we forget that his own barbarous policy helped to colonize his southern territories. Leaguing, when it suited his purpose, against the Norman aggressors, he wasted the country as far as Durham in 1070, bringing back with him so many prisoners of both sexes, that an old chronicler remarks,—"So great was the number of captives, that for many years they were to be found not only in every Scottish village,

but in every Scottish hovel."[1] Thus by the most opposite means was a Saxon population invested in the possession of the Lothians. Norman adventurers followed, dissatisfied with the Conqueror's rewards, as the Saxons of old blood were impatient of the Norman yoke. The Saxon Edward, it will be remembered, had Norman blood in his veins, spent his early years in Normandy, and when he at length attained to the English Crown, surrounded himself with Norman barons and churchmen, and bestowed on them some of the highest preferments in the kingdom. At his Court, therefore, Malcolm could acquire no such prejudices against the Norman as animated the expatriated followers of Harold. To him the discontented Norman baron with his hardy men-at-arms would be as welcome as the Saxon thane with his faithful retinue. Both found a ready portion in the fertile Lothians, in an age when even the multitude of children were "as arrows in the hands of a mighty man." It was a peaceful and nearly bloodless revolution, yet by it this northern kingdom was more completely transformed than by all the protracted struggles of Roman, Pict, or Northman. The sceptre was still swayed by a prince of the Celtic line; but the power was passing away for ever from the last independent representatives of the nomade colonists of Europe.

The victory at Hastings was far less effectual in making England Norman than in making Scotland Saxon. In this respect the usurpation of Macbeth, which drove Malcolm to seek refuge and to acquire his education at the English Court, exercised a remarkable influence on the future history of both countries, and prepared in requital, a home for the southern Saxon, which has proved the birthland of the most vigorous offshoot of the race. But chief among the Anglo-Saxon fugitives is the noble princess, sister of Edgar Atheling, who brought to the Scottish throne the civilisation as well as the hereditary rights of the race of the Confessor. The earlier years of Malcolm's reign appear to have exhibited all the fiercest characteristics of a disputed succession; and it is probable that during the long years of conflict between Northman, Celt, and Saxon, the native arts and civilisation were greatly deteriorated. Its ecclesiastical system had suffered no less than its civil arts. The church of St. Columba had been spoiled of its temporal possessions, and had parted with many of its canonical usages, including the celibacy of the clergy. that mainspring of the medieval church, which appears to have been

[1] Sim. Dunelm. p. 201. Hailes' Annals.

so heartily favoured by the good Abbot of Iona. It is no part of the plan of this work to embrace ecclesiastical controversies, or to attempt to settle disputed questions relative to the precise doctrines and practice of the ancient Culdees. So interesting an inquiry could only be injured by a superficial notice of the modern disputes relative to their Episcopal or Presbyterian constitution, and the ancient ones about the tonsure and the times of observing Easter. Trivial as such controversies may be thought by some, they appear to have involved questions of higher moment, including that of the independence of the Celtic Church. The neglect, if not the entire abnegation of the celibacy of the clergy for a considerable period prior to the Saxon Conquest, is, however, indisputable; and the orthodox grandniece of the Confessor, in giving her hand to Malcolm Canmore, plighted troth with the legitimate grandchild of an Abbot of Dunkeld. To assume the primitive purity or simplicity of our early northern Church on such grounds would be erroneous. It is sufficient for our present purpose to know that it differed in various important respects from the Roman Church of western Christendom. The peculiar features which have attracted our notice in previous chapters originated chiefly from the isolation of the Scottish Church and nation; but that isolation was now to come to an end. The Princess Margaret became the queen of Malcolm Canmore, and the sharer of his throne. Her gentle spirit, not untinctured by the asceticism of the age, softened the fierce passions of her husband, and made his wild nature bend obedient to her will. The grandniece of the Confessor became the reformer of the Scottish Church, and the redresser of its abuses. Provincial councils were summoned at her command, at which Malcolm became the interpreter between the Saxon queen and his Celtic clergy. Her great aim was to assimilate the Scottish Church to that of England, and indeed of Rome, neither of which it would seem to have greatly resembled. To her we chiefly owe the eradication of the Culdees, (*Gille-de*, servant of God,) the successors of the first recluses and monks who established religious fraternities in Scotland, and who differed latterly from other orders probably more in their laxity as to monastic observances than on points of faith. Yet there were not wanting among them even then some worthy representatives of their primitive missionary founders. The Chartulary of St. Andrews, which furnishes some curious evidence of their absorption, partly by conformity and partly by force, into the new orders of canons regular,

also affords some insight into these primitive religious societies not unsuited to awaken regrets at their arbitrary extinction. The sons of St. Margaret, Edgar, Alexander, and David, though differing in nearly every other respect, concurred in carrying out the reformation by which the Scottish Church was restored to uniformity with the ecclesiastical standards of the age. Worthy descendants of the Confessor, they not only made the Church of England their model, but frequently selected their spiritual directors from its clergy, preferred English priests to the bishoprics, and peopled their abbeys with its monks. The "Saxon Conquest" was in truth even more an ecclesiastical than a civil revolution, and the evidences of its influence are still abundant after the lapse of upwards of seven hundred years. In the period which intervened between the landing of the fugitive Saxon princess at St. Margaret's Hope and the death of her younger son David, nearly all the Scottish sees were founded or restored, many of the principal monasteries were instituted, their chapels and other dependencies erected, and the elder order of Culdee fraternities and missionary bishops for the first time superseded by a complete parochial system. It was David I. who ejected the brethren of St. Serf established on the secluded little isle of Lochleven, and merged both that and the Culdee house of Monymusk into the new priory of canons regular of St. Austin established at St. Andrews. We read with no little interest the brief inventory of the Lochleven library, thus unscrupulously seized by the "soir sanct." Among its sixteen volumes were the Gospels, the Acts of the Apostles, and the three books of Solomon, a Commentary on the Song of Solomon, and another on the book of Genesis:[1] no discreditable indication of the studies of these recluses of Lochleven, whom some have inclined to rank among the Protestants of their age. But old things were then passing away under the guidance of reformers not less zealous than those of the sixteenth century. An entire change, moreover, necessarily resulted from the novel relations subsisting between the northern and southern kingdoms. The seat of Scottish civilisation had hitherto been chiefly in the north and west, while the Lothians and the southern dales had been but a debatable land—the battle-ground oftener than the secure possession of the Pictish or Scottish kings. On this very account great facilities existed for its settlement by the southern fugitives, ready to hold it of the Scottish crown by feudal military tenure, and

[1] Liber Cart. Sanct. Andree, p. 43.

to defend it against the aggressions of the new power established in England. A charter preserved in the treasury at Durham, and belonging at latest to the very commencement of the twelfth century, furnishes interesting illustration of the new elements of strength and progress infused into the kingdom by the colonization of its southern districts. The charter relates to the founding of the church of Edenham, on the north bank of the Tweed, in the rural manse of which the poet of the Seasons was born in the year 1700,—one also of the many results which have flowed from that old deed of piety, executed five centuries before. The settler is Thor the Long, probably neither of Saxon nor Norman blood, but a descendant of one of Hardacnute's Danish followers, who established himself on the banks of the Tweed by invitation of Edgar, the son and successor of Malcolm. The charter thus describes at once the royal grant and the pious gift of the new settler, and may very happily serve to illustrate the process of Teutonic colonization of the Scottish Lowlands: "To all the sons of holy mother Church, Thor the Long, greeting in the Lord: Be it known that Aedgar, my Lord, King of Scots, gave to me Aednaham, a desert; that with his help and my own money I peopled it, and have built a church in honour of St. Cuthbert; which church, with a ploughgate of land, I have given to God, and to St. Cuthbert and his monks, to be possessed by them for ever."[1] Such was in reality the process by which the "Saxon Conquest" was accomplished. No wonder that it should be unnoticed by contemporary chroniclers, and remain a puzzle to historians who esteem wars and regal successions the sole indices of the past. It was wastes not men that had to be conquered, and therefore the victory is chronicled alone in such brief parentheses as that of the Edenham charter.

It is easy to see how complete a change must necessarily have taken place on the ecclesiastical architecture of Scotland at the period of its receiving so great an impulse. The Christian arts, introduced to a great extent along with the new faith from Ireland, had hitherto been modified chiefly by local influences. The reformation effected by Queen Margaret and her sons abruptly arrested the development of a peculiar native style, and made the architecture of England as well as its ecclesiastical system supply the new Scottish model. With the elevation of the Saxon princess to the Scottish throne, we for the first time discover a chronological coincidence in

[1] Raine's North Durham, App. p. 38.

the styles of the ecclesiastical architecture of Scotland and England. In the sixth year of the reign of Malcolm II., the grandfather of Duncan, *i.e.*, in 1010, according to a charter of doubtful value, which has been the subject of no little diversity of opinion,[1] he gave to God, the blessed Mary, and all the saints, the church of Mortlach or Murthelach, in perpetual gift, erecting it into an Episcopal see, in obedience, as it is said, to a vow made in the immediate vicinity of the church when battling with the Norwegian Invaders. In its present form the charter seems to be unworthy of implicit credit, yet the circumstantial accounts of Fordun and Boece agree with it in every essential point, and it appears reasonable to assume that its most important features are not without some authority and historical value. David I. translated the see from Mortlach to Old Aberdeen in 1125, endowing it for the first time with revenues proportionate to the dignity of the bishopric. It appears, however, if we may so far trust the charter, that Mortlach was the seat of a religious foundation prior to the honours conferred on it by the victorious Malcolm, the humble church of which was elevated, in fulfilment of the royal vow, to the rank of a cathedral. At such a date we might expect a building corresponding to those of which the remarkable relics remain at Abernethy and Brechin; and even yet, though sorely defaced by modern additions, the venerable parish church of Mortlach is believed to include portions of the primitive cathedral. The holes are pointed out where the victor is affirmed to have caused the heads of three of the vanquished Norse leaders to be built into the wall as a votive offering: a singular but sufficiently characteristic memorial of the ferocious spirit of the age, though resting on little better authority than local tradition. "At whatever time," says the Old Statist, writing about 1795, "three skulls may have first been put there, there they surely were; and not longer than about thirty years ago was the last of them picked out and tossed about by the school-boys."[2] The former proportions of the church were ninety feet long, including a chancel of twenty-seven feet, while its greatest breadth was only twenty-eight feet. Within the last twelve years great alterations and additions have been made, with the usual inattention to the ancient features of the venerable edifice. The original walls are very massive. The windows, where unaltered, are extremely narrow and deeply

[1] Registrum Episcopatis Aberdonensis, Pref. xii.-xvi. Keith's Bishops, Append.

[2] Sinclair's Statistical Account, vol. xvii. p. 443.

splayed internally, the work probably of the new era which we have now to consider, though it is not impossible that some portions of the original church of Mortlach may still remain.[1]

It was about the year 1070—the precise date is uncertain—that Malcolm Canmore wedded the gentle and pious Saxon princess, whose amiable disposition insensibly softened the rugged nature of her husband, and swayed him by the influence of a most sincere affection, till he became the docile minister of her will. We possess a narrative of the private life of Malcolm and his Queen, on the authority of Turgot the confessor of the latter, who had frequent opportunities of intimate intercourse with both. Amid the austerities and superstitions which belonged less to the individuals than the age, it is impossible not to admire the rare picture of domestic charity and kindly affections which it discloses. It was at Dunfermline, according to Turgot, that the auspicious marriage of Malcolm and Margaret took place; and one of the first works of the queen was to found a church in the place where her nuptials had been celebrated, which she dedicated to the Holy Trinity, and enriched with many costly gifts. Such was the origin of the Benedictine Abbey of Dunfermline, though it can scarcely admit of doubt that some church or chapel existed at this chosen place of royal residence prior to the foundation of St. Margaret. The editor of the "Registrum de Dunfermelyn" remarks, "The original church of Canmore, perhaps not of stone, must have been replaced by a new edifice when it was dedicated in the reign of David I. If any part of that structure remain, it must be little more than the foundations. Age, or the accidents of a rough time, or the increasing consequence of the house, gave rise to an enlarged and more magnificent structure about the middle of the thirteenth century."[2] It cannot be difficult, I think, to shew that such conclusions are erroneous, and at least totally inadmissible in reference to the sombre and impressive nave of Dunfermline, the oldest and perhaps most interesting specimen of the Romanesque style now remaining in Scotland. But the whole reasoning proceeds on the imperfect views

[1] Not having had an opportunity of personally inspecting this interesting but little heeded Scottish relic, I have had to depend on the kindness of a local correspondent for the description of its present state. It appears to be early and exceedingly plain Romanesque work, with some later and many modern additions. Both in style and singularity of proportions it bears very considerable resemblance to the simple little Romanesque chapel of Kilcolmkill, in the parish of Southend, Argyleshire.

[2] Regist. de Dunferm. Pref. xxv.

hitherto entertained of the state of civilisation and the progress of the arts in Scotland previous to the commencement of its medieval era, dating from the reign of Malcolm, when for the first time both its civil and ecclesiastical institutions were assimilated to the rest of Europe.

So far from Malcolm Canmore's church being probably of wood, there are some of the most substantial early Romanesque structures in England which there is good reason for ascribing to the same builders who erected the Church of the Holy Trinity at Dunfermline, in the lifetime of its pious foundress. Malcolm was present at the laying of the foundation stone of Durham Cathedral by the confessor and biographer of his own pious queen, on the 11th of August 1093, shortly before his last fatal rupture with England; and his son Alexander witnessed the deposition of the relics of St. Cuthbert in the same sacred edifice in 1104. No one who has had the opportunity of examining both Durham and Dunfermline, can have failed to observe the remarkable correspondence of their character and details. The same massive and dissimilar piers: the same chevron, spiral, and billet mouldings distinguishing the compartments of the nave: the same chamfered cushion capitals to the heavy cylindrical shafts: as well as a marked conformity in many minor details, all point to a common origin for Durham Cathedral and Dunfermline Abbey. St. Finnan, a monk of Iona, is said to have built the first church of Lindisfarne, a timber erection, and the original seat of the see of Durham, in the seventh century. Scottish missionaries twice introduced the faith into Northumberland; Iona and Melrose supplied successive heads to the southern house; and even after the Conqueror compelled the chapter to receive a bishop of his appointment of Norman blood, the intimate relations between the see and the northern abbeys appear to have been very temporarily interrupted. In so far as greater plainness and massive simplicity afford any ground for assigning priority of date, the argument is in favour of the greater antiquity of Dunfermline Abbey, which must have been far advanced, if not indeed completed, according to the original design, before the foundation of the Cathedral at Durham was laid in 1093, as the death of both of the royal founders took place before the close of the year; and they were buried there before the rood altar. Perhaps the fact of their interment there, and not in the choir,—to which the bodies of both were translated with solemn ceremonial and, according to the old chroni-

clers, with miraculous attestations of their enduring affection,[1] four years after the canonization of St. Margaret in 1246,—may be thought to afford presumptive evidence that the abbey choir was then incomplete. This, however, is by no means probable, as the choir was always the part of the church first built. But it was no doubt with a view to receive into a structure worthy of so sacred a depository the relics of the sainted queen that the choir was remodelled according to the prevailing First-pointed style of the thirteenth century. We possess a curious proof that even the reconstruction of the choir was effected, not by demolishing and rebuilding the whole, but merely by remodelling the original masonry of the eleventh and twelfth centuries,—a process of common occurrence with nearly all the large cathedral and abbey churches; for by a bull of Pope Innocent IV., dated September 15, in the seventh year of his pontificate,[2] (1250,) he dispenses with the reconsecration of the abbey, because the walls of the former church for the most part still remained.[3] No doubt the nave also underwent some modifications, of which it now bears evidence, but all its essential features can be assigned to no other period than that of the original foundation.

To the same early period must be assigned the erection of the interesting little chapel of St. Margaret in the Castle of Edinburgh, which it was my good fortune to rediscover a few years since, when converted to the vile use of a powder magazine, after its very existence had been lost sight of for upwards of a century.[4] Some of its characteristic details have been thought rather to belong to the later period of the Romanesque style; but a careful examination of the simple capitals of the jam-shafts, and the low relief of the mouldings on the chancel arch, has satisfied me that there is no evidence in its structure inconsistent with the idea of its being the oratory of Queen Margaret, which, according to Barbour, she caused to be decorated with a painting of prophetic import, still remaining in his day,[5] (obiit 1396.) The plain coved vault of the apse, and the small round-

[1] Wyntownis Cronykil, b. vii. chap. x.

[2] Regist. de Dunferm., p. 184.

[3] The reference is no doubt also to so large a portion of the original structure having been left entire, including the present nave: "Licet ecclesia vera post consecracionem ipsius per nobilioris structuræ fabricam fuit augmentata quia tamen proponitis quod antiqui parietes ejus pro majori parte in pristino statu perdurent. Vobis auctoritate præsentium indulgemus ut eisdem parietibus in pristino statu perdurantibus nonnullis vos compellere valeat ad eandem Ecclesiam propter hoc denuo consecrandam," &c.

[4] Memorials of Edinburgh in the Olden Time, vol. i. p. 128.

[5] Barbour's Bruce, book vii. l. 1037; Dr. Jamieson's Edition, vol. i. p. 211.

headed and entirely unornamented windows, so different from the later work of Dalmeny or Leuchars, confirm this opinion. By a charter bearing date 14th February 1390, King Robert II. endowed the altar of the chapel of St. Margaret the Queen, in Edinburgh Castle, with a yearly rental of eight pounds, but which was subsequently transferred to the chapel of St. Mary the Virgin, in the same fortress, probably erected at that period, and only demolished towards the close of the last century.[1] The great improbability of the oratory of Queen Margaret having been demolished, and so small and plain a chapel built in her honour either in the reign of Alexander or David, seems to render the conclusion unavoidable, that the interesting little chapel of St. Margaret is directly associated with the pious queen, to whom there can be little doubt Shakespear alludes in Macbeth, though he makes Macduff speak of her not as the wife but the mother of Malcolm:—

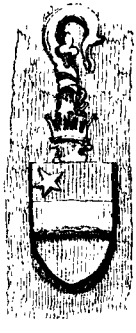
> "The queen, that bore thee,
> Oftener upon her knees than on her feet,
> Died every day she lived."[2]

The portions which remain of the original Romanesque structure of Alexander I.'s foundation on Inchcolm, erected about 1123, are characterized by the same unornate simplicity; nor is it till the reign of David I. that we have any certain examples of the highly decorated late Romanesque work. Even in the Abbey of Jedburgh much of the original work is heavy and plain, compared with the singularly rich details which lighten the solid masses of Kelso Abbey. Of Holyrood Abbey, founded by David I. in the same year with that of Kelso, comparatively little use can be made in fixing the chronology of Scottish medieval architecture. From its vicinity to the capital, and its long occupation by the Court, every invading army spoiled or burnt it, and almost every abbot made some new additions or repairs, till it has become a complete ecclesiological enigma. In the cloister doorway, on the south side of the nave, it presents undoubted remains of the original foundation of David I. The west tower, the arcades in the aisles, and various other portions, indicate that the main walls

[1] Memorials of Edinburgh, vol. i. p. 127. Notices of both chapels repeatedly occur in the Chamberlain's Rolls; but with an obvious confusion of the two—explicable perhaps on the supposition that the chaplain was bound to serve both altars. A curious notice of a meeting held in the chapel of the Castle of Edinburgh in 1447 occurs in the *Registrum Episcopatus Glasguensis*, vol. i. p. 367, No. 351.

[2] Macbeth, Act IV. Scene 3.

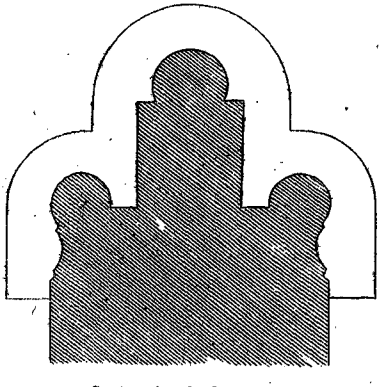
of the building belong to the transition-period, prior to the complete development of the First-pointed style; most probably in the minority of Alexander III. The great west doorway and the centre aisle are in the very best style of late First-pointed; while the external north wall and its richly decorated buttresses, as well as various additions on the south side, are reconstructions of Abbot Crawfurd, who succeeded to the abbacy in 1457, as appears from his arms still visible on various parts of the new work. The unique windows of the west front, with segmental arches and nondescript tracery, though bearing some resemblance to portions of the palace in Stirling Castle, ascribed to the reign of James IV., will, we suspect, be more correctly assigned to the era of his unfortunate descendant, Charles I., whose cipher is carved on the beam of the great doorway below. The beautiful arcade of early but unusually rich First-pointed work, and with sculptured heads in the spandrils, which adorns the west front of the tower, is in some respects unique, and is certainly unsurpassed in the richness of its details by any contemporary work.



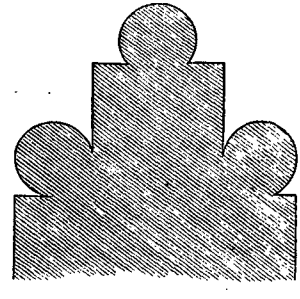
The cathedral of St. Magnus at Kirkwall, in the Orkneys, has already been referred to as an exceedingly interesting specimen of late Romanesque work, commenced about the year 1136; so that from the banks of the Tweed to these remote northern isles we find the Romanesque style universally adopted in the first years of the twelfth century. One curious and unique example of this period, however, must not be overlooked. The remarkable little church and tower of St. Rule, at St. Andrews, have excited scarcely less interest than the round towers of Brechin and Abernethy, and have been the subjects of equally vague speculations. The slender tower, measuring upwards of an hundred feet in height, by twenty feet eight inches in breadth at base, while the choir is only thirty-one and a half feet long,[1]

[1] The dimensions of the choir of St. Rule's Church, as it now stands with the chancel demolished, are, extreme length externally thirty-one feet eight inches, breadth twenty-five feet, breadth of chancel arch within the inner pillars nine feet, present height of the chancel arch, the base of the pillars being covered, twenty-one feet four and three-quarter inches, present height of external wall thirty feet. The windows are small, round-headed, and quite plain, with a deep internal splay, and an external one of little more than one-fourth of the whole thickness of the wall. They measure in the day-light, or place for inserting the glass frame, six feet five inches high, and one foot eight inches broad.

is well calculated to arrest the attention, though the edifice is, as a whole, more remarkable for its singular and perfectly unique features than for the grace or consistency of its proportions. The remarkable excess in height over all the other measurements of the tower prevails, though to a less extent, in the entire design. The accumulated soil covers the bases of the columns of the chancel arch, and thus detracts from this peculiar characteristic of the primitive metropolitan cathedral; but even now, while the interior of the choir measures only nineteen feet ten inches in breadth, the present height of the chancel arch is twenty-one and a half feet, and that of the arch in the tower, formerly connecting the nave and choir, is twenty-four feet two inches; from the floor to the top of the side walls is twenty-nine feet seven inches, and to the apex of the original high-pointed roof, as shewn on the tower wall, is fifty-five feet five inches.[1] Assuming the existence of three steps at the chancel arch, we shall not probably err in adding to all the latter measurements at the least from four to five feet,



Section of Arch Mouldings.

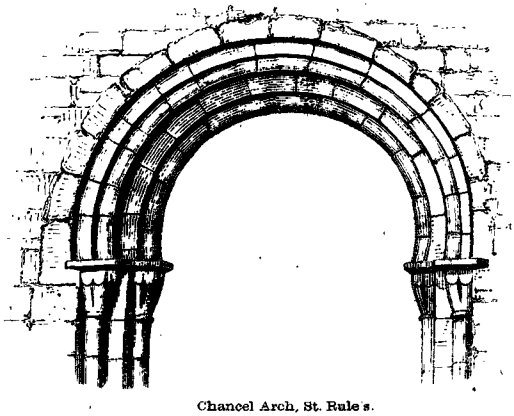


Section of Pier.

thereby presenting a remarkably striking contrast to the very narrow proportions of the choir. The details are extremely simple. The sections of the piers and arch mouldings of the chancel figured here will suffice to shew that they partake somewhat of the meagreness of the larger features, while they are entirely devoid of the massiveness so peculiarly characteristic of the older Romanesque. Nevertheless, in this, as in other details of the building, the architect has shewn much ingenuity in economizing the limited means and materials at his command: the tenuity and apparent meagreness of design of

[1] The marks of three successive roofs are traceable on the east wall of the tower.

the chancel arch, as seen in section, producing in reality an effect of greater breadth and solidity than a number of less distinct and boldly relieved features could have effected. The columns are finished by simple double-cushioned capitals, surmounted by a plain chamfered abacus, from which springs the arch, one of the most singular features of this curious building. Its details are shewn in the section, but the arch considerably exceeds a semicircle; and mounted on its lofty piers, with the tall, narrow tower beyond, presents a remarkable but by no means unpleasing effect. From the excessive height which prevails throughout all the most prominent features of the church of St. Rule, it possesses, as a whole, little in common with such sombre and massive structures as Kirkwall or Dunfermline, or with the more ornate little Romanesque churches of Leuchars or Dalmeny. Its walls, indeed, which have so well withstood the tooth of time, are only two feet seven inches thick. A careful examination of its details, however, leaves no room to doubt that it belongs to the twelfth century, when the older Romanesque was being modified by many novel additions prior to its abandonment for the First-pointed style; and there can be little risk of error in recognising in the church of St. Rule the basilica of Bishop Robert, the founder of the Priory of Canons Regular of St. Andrews, about A.D. 1144. The bishop had much to reform at St. Andrews ere either his new foundation or his Episcopal see were placed on the creditable footing in which he left them to his successor; and we may, with little hesitation, ascribe the singular proportions of the church of St. Rule to the desire of giving with his first slender means the utmost dignity that they admitted of to the metropolitan church. The early chapter seals of St. Andrews afford some of the few undoubted examples of a designed and tolerably accurate portraiture of an ancient church. The oldest of these, a seal attached to a charter A.D. 1160, but itself no doubt of a somewhat



Chancel Arch, St. Rule's.

earlier date, shews the miniature cathedral as it probably originally appeared, with central and west towers, choir, and nave, but altogether of much smaller dimensions than the greater number of parish churches. The windows of two lights in the top of the tower may be compared to the plainer example, divided by a cylindrical shaft, with cushioned capital, and moulded base, in the lower part of the tower of Dunblane Cathedral, a fragment of the first cathedral of St. Blane, possibly of the time of Canmore, and certainly not later than the reign of Alexander I. But the lighter and more ornate style of those of St. Rule fully accord with the later date assigned to it here.

Specimens of Romanesque parish churches are by no means rare in Scotland. Besides those of Leuchars and Dalmeny may be named Duddingston, Ratho, and Borthwick, Mid-Lothian; Gulane, East-Lothian; Uphall, Abercorn, and Kirkliston, West-Lothian; St. Helen's, Cockburnspath, Berwickshire; Mortlach and Monymusk, Aberdeenshire; St. Columba's Southend, Kilchouslan, Campbeltown, and the beautiful little ruined church of St. Blane, on the island of Bute, with its Romanesque chancel arch and graceful First-pointed chancel; besides various others more or less perfect still remaining in Argyleshire—all presenting interesting features illustrative of the development of the Romanesque style in Scotland, and furnishing evidence of the great impetus given to church building at the period.

Such was the change effected on Scottish art by the remarkable historical events which gave the throne of England to the Norman invader, and established the descendants of the Saxon Alfred on that of Scotland. For nearly a century the ecclesiastical architecture of England and Scotland is one in style, coincident in date, and uniform in the character of details. This unwonted uniformity, however, is clearly traceable to causes the full effect of which was ere long modified by other influences. Soon after the introduction of the First-pointed or Early English style a marked difference is discoverable, and thenceforth the dates and peculiar characteristics of the ecclesiastical architecture of the two countries disagree in many essential points. Notwithstanding the adoption of the somewhat exclusive term *Early English* for the First-pointed style, it appears to have reached its limits at fully as early a period in Scotland as in England. The choir of Glasgow Cathedral, built by Bishop Jocelin, between 1188 and 1197, though not to be compared with the Cathedral of Salisbury in loftiness of proportions, or grandeur of effect as a

whole, is certainly further advanced in the rich and finished character of its beautiful capitals and other varied details, though the English cathedral was not begun till A.D. 1220, or thirty-two years later than that of St. Kentigern. The crypt of Glasgow Cathedral, which formed the first work of Bishop Jocelin, is not surpassed by any structure of its class, and hardly indeed equalled by any other crypt in the kingdom. As a specimen of pure First-pointed work it is deserving of the most careful study; and the recent judicious restorations effected under the direction of the late Mr. William Nixon, have rendered it an object which the student of medieval architecture may visit with unqualified admiration and delight. So little has hitherto been done in the way of investigating the history or peculiar character of Scottish Ecclesiology, that very few examples have yet been assigned to their true date. It has been customary to ascribe the founding of the cathedral church of St. Andrews, for example, to Bishop Arnold, A.D. 1159-1163, and loosely to assume from this that a considerable portion of it was of that early date. But the mention by Wyntoun of his interment in the "auld kyrk,"[1] *i.e.*, the church of St. Rule, must be accepted as some indication that the new cathedral had made no great progress at his death. The beautiful fragment of its choir which still remains may with little hesitation be ascribed to the later episcopate of Bishop William, A.D. 1202-1233; during whose occupation of the see we have evidence of considerable building being in progress. Specimens of pure First-pointed work are by no means rare in Scotland, ranging from the stately cathedral of St. Mungo, or the ruined abbey of Dryburgh, to the chancel of the lovely little church of St. Blane in the Isle of Bute. But with the exception of the magnificent fragments of the abbey of Aberbrothoc which still remain to us, no more characteristic specimen of the peculiar style which arose in Scotland in the reign of William the Lion can be referred to, than the three eastern bays added to the old Romanesque cathedral of St. Magnus, in the remote Orkneys. The details are indeed for the most part First-pointed, and the piers beautifully moulded and clustered shafts, but the arches that rise from them are of the same form as those of 1136, though also richly moulded in conformity with the style which superseded the Romanesque in the latter part of the twelfth century. Such work can neither be consistently classed with the true First-pointed, of which

[1] Wyntownis Cronykil, book vii. chap. 7.

Glasgow Cathedral is a type, nor with the later Scottish Decorated. Down to the close of Malcolm IV.'s reign the ecclesiastical architecture of Scotland and England may be held to coincide alike in style and date: the Scottish First-pointed being upon the whole both earlier and more fully developed than the corresponding English style, according to the chronology assigned by Mr. Rickman. But with the first symptoms of transition the ecclesiastical architecture of Scotland begins to assume its peculiar characteristic features, marked by a return to the use of the semicircular arch, and a preference of circular to angular details, employed not indiscriminately or at random, but on a fixed principle, along with the consistent use of the pointed arch, and of details peculiar to the later styles. The fact of such peculiarities is more easily demonstrated than its cause. The intimacy and interchange of races with England under Malcolm Canmore, and the complete assimilation of the Church of Scotland to that of England, abundantly account for the uniformity of the English and Scottish Romanesque Period. Perhaps we shall not overrate the effect of the profuse zeal and liberality of David I., and the fruits of his example, in assuming that the very numerous specimens of beautiful late Romanesque work, on every scale, from cathedrals and abbeys, to simple little village churches, built almost entirely in his reign, may not have been without their influence in stamping some of its most marked types with an enduring authority on the national mind—in all periods of its history characterized by a certain tenacity of adherence to a favourite idea. Be this, however, as it may, the retention of the use of the semicircular arch, and of forms of the same type, after their abandonment in the ecclesiastical architecture of England, becomes the source of a style peculiar to Scotland, and which it has been too much the custom hitherto to regard as a mere provincialism little worthy of note. The worst fruit of this has been, that our ancient Scottish edifices have been remodelled in accordance with rules derived entirely from contemporary English models; and our architects have employed themselves for nearly half a century in deliberately obliterating the most characteristic features of native art.

The influence which stamped its character on the age of David I. was more ecclesiastical than civil. The intercourse with England, though not uninterrupted, continued during his reign and that of his imbecile successor sufficiently close and frequent to account for much similarity in the arts and manners of the two kingdoms; nor was it

till the quarrel of William the Lion with Henry II., in 1172, his subsequent imprisonment, and the disputed claims of independence both of the Church and Crown, that the effectual alienation took place from which we may trace in part the divergence of Scottish from English models. The claim of the dependence of the Scottish Church on the English archbishops was probably more effectual than any civil change in severing the two Churches, with all that pertained to them. But before this lasting disruption took place, the First-pointed style had been fully developed, and was already expanding into the rudiments of the next transition. There were indeed constructed, to some extent contemporaneously, works in what may be correctly enough styled the Early English, or pure First-pointed style, of which Glasgow choir is an example, and others like the abbey of Aberbrothoc, essentially peculiar in many respects. To the latter I would propose to apply the term, *Scottish Geometric*, reserving for the more elaborate style, ultimately developed after the War of Independence, the name of *Scottish Decorated*.[1] The choir of Glasgow Cathedral exhibits a series of extremely interesting examples of the pierced interspaces of the First-pointed window, in which the tracery of the Decorated Period originated; while the nave of the same beautiful edifice, the work of Bishop William de Bondington, 1233-1258, is no less valuable as an example of the succeeding stage, where the grouped lancet windows have given place to a pointed arch divided by plain mullions and intersecting tracery into several lights, which again have in some cases been filled in with geometric figures, still very partially blended into a homogeneous or consistent whole. The circular arch, however, was never totally abandoned. In the chapter-house of the abbey of Inchcolm, for example, a beautiful little octagonal structure of two floors, the doorway is a semicircular arch, though with mouldings entirely of the later style; the chapter-house is lighted with small lancet windows, while the chamber above has corresponding apertures with semicircular heads. This preference of the semicircular arch, especially for doorways, was never afterwards laid aside. The great west entrance of the magnificent abbey of Aberbrothoc, founded by William the Lion in 1178, is an exceedingly

[1] It might perhaps better coincide with the newer English nomenclature to characterize the Romanesque as *First-round*, the succeeding style as First-pointed; and then the Scottish style resulting from the two, as *Second-round*; and the peculiarly national style into which it was finally developed as *Second-pointed*. The great objection is the necessity of speaking in either case of *Round-pointed*, or of *Pointed-round* arches.

rich and beautiful Scottish doorway of the period, presenting in its details the blending of forms derived both from the Romanesque and First-pointed styles. The entire building furnishes a most interesting example of the peculiarities of early Scottish Gothic, marking, as I conceive, the historic epoch in which the native styles had their rise. In the south transept, for example, this is exhibited with great freedom and variety of character. Three tiers of arcades decorate the wall: the lowest consists of a series of equilateral pointed arches, each filled with a cusped trefoil head, and ranging with and repeating the same mouldings is a small but finely proportioned semicircular headed doorway. The arrangement is exceedingly happy, admitting of the greater breadth of doorway without breaking the line formed by the top of the arcade, or disturbing the uniformity of its series of engaged shafts. So far from seeming to be incongruous, it has a most harmonious effect to the eye. Above this is a second arcade, composed entirely of the lancet arch; while the third, or highest tier, consists of a series of semicircular arches, forming the continuation of the triforium, so that the arrangement of the orders seems deliberately reversed. The pleasing effect of the whole can only be judged of when seen *in situ*.

Meanwhile the arts continued to progress, advancing towards more complete development of the medieval architecture, then common in all its most essential features to nearly the whole of Europe. The Canons of the General Council of the Scottish Church, in 1242, preserve to us a remarkable ordinance for an annual national collection throughout the kingdom in aid of the building of Glasgow Cathedral, the present nave of which was then in progress. The translation of the relics of St. Margaret to the choir of Dunfermline Abbey, in 1250, marks the completion of that interesting contemporary work,—now unhappily replaced by a pseudo-choir in the style of the year 1820. Works manifestly of the same period, and more markedly Scottish, are still common in many districts: as in parts of Dunblane Cathedral, of Paisley Abbey, Brechin Cathedral, the east end, and other portions of the Cathedral of the Orkneys, &c. But a great revolution was at hand, which abruptly severed the already loosening cords that for a time had brought the ancient kingdoms and the Churches of Scotland and England into unwonted unity of purpose and feeling. In 1285 died the wise and good king, Alexander III., leaving his kingdom to all the miseries of a divided regency and a disputed suc-

cession. Margaret of Norway, granddaughter of Alexander, an infant, at a foreign court, had been acknowledged the heir to the crown of Scotland very shortly before the sudden death of the king. Eric, king of Norway, alarmed at the dissensions among the Scottish regents, appealed to Edward of England to interpose, and thus commenced the series of memorable events in our national history, ending in the war of independence, which placed the Bruce upon the throne, and finally shut out England from all influence on Scottish policy or art. Thenceforth to have "an English heart" was the Scottish name for treason; and the term deliberately applied even in the Acts of the Scottish Parliament to their southern neighbours is "our auld enemies of England."

The year 1306, in which Robert Bruce ascended the throne of his ancestors, almost exactly corresponds with the date (1307) assigned by Rickman for the close of the First-pointed or Early English style. But meanwhile a period of division, anarchy, and bloody war, had lasted in Scotland for upwards of seventy years, during which the only arts that found encouragement were those of the armourer and the military architect; nor was this state of things brought to a close twelve years after the coronation of the Bruce, when, in the year 1318, the Pope, John XXII., the obsequious tool of England, renewed the excommunication of Clement V. against the king and all his adherents. The very registers and chartularies are ominously silent; though here and there we find evidence that the old spirit of pious largess to the Church was only temporarily overborne by the stern necessities of the time. Bishops and abbots meanwhile fought alongside of their fellow-countrymen in the foremost of the fight, or, like the good Abbot of Inchaffray, animated them to strike for liberty and independence. The results of all this are abundantly apparent in the earliest succeeding examples of ecclesiastical architecture. They partake of the mingled features of the First and Middle-pointed styles, and are in many cases characterized by a degree of plainness and meagre simplicity which renders the application of the term *Decorated* occasionally very inappropriate to what contain, nevertheless, the rudiments of the style. What marks them still more with a novel character are features such as the unusually small side doorways, the small windows, the single aisle, and, above all, the plain vault, whether pointed or round, all of which appear to be traceable to the almost exclusive devotion to military architecture by the

builders of that age. The Church was then *militant* in a peculiar sense, and found it difficult to reassume the fitter and more becoming garb of peace.

The plainest, as well as the most ornate Scottish ecclesiastical structures subsequent to this date, almost invariably exhibit some interesting evidence of the adherence to the use of the semicircular arch, and its cognate forms, not only in doors, windows, and arcades, but in the tracery of pointed windows, which at length resulted in the peculiar style of Scottish Decorated Gothic. The Scots, in truth, did of necessity, and undesignedly, what the modern artists, especially of Germany, have affirmed in their practice to be indispensable to the revival of art. They returned nearly to the rudiments of pointed architecture, and wrought out a system for themselves. From this date the rules of English ecclesiology can only mislead the student of Scottish ecclesiastical architecture.

The choir of the singular church of the monastery of Carmelites or Whitefriars, at South Queensferry, founded by Dundas of Dundas in 1330, is an exceedingly interesting specimen of the simple style of the period. The windows, which are few and small, divided by plain mullions, with no other tracery than their bending into lancet and interspaces in the head; the roof a plain vault without groining, and with a singularly sombre look from its entire elevation above all the windows except at the east end, there being no aisles, and consequently no clere-story; the piscina, on the south side, a recessed pointed arch, neatly moulded, but without cusping or other ornament; the sedilia alongside of it, a flat-arched recess, rounded off at the angles by a segmental curve, and divided into three spaces only by pendant mouldings or cusps, too imperfect now to shew exactly what they may have been: all these are characteristic chiefly of the extreme simplicity of the details. But here also the semicircular arch occurs. The credence in the east wall, on the north side of the altar, is recessed with mouldings nearly similar to the piscina, and like it with all the mouldings sunk within the recess, but with a rounded instead of a pointed arch. The priest's door, on the south side of the choir, is of the same form externally, though square-headed within; and a plain ambry occupies the north wall, directly opposite to the piscina. The eastern gable of the church is decorated externally in a novel manner with a niche and various heraldic devices, probably of later date, and coeval with the nave and south transept,

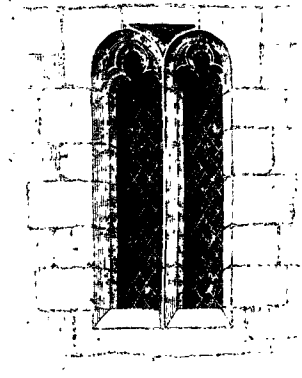
which are curious specimens of the Perpendicular style.[1] This extremely interesting example of an important period of Scottish Ecclesiology is generally overlooked, though it lies within a mile of Dalmeny, the favourite example of the parochial church architecture of the twelfth century. Its very existence is probably unknown to thousands who annually pass the neighbouring ferry, as it lies beyond the route of travellers going to the north.

The little ruined church of the village of Temple, East-Lothian, is another simple but pleasing specimen of the transition from the First-pointed to the Scottish Decorated style. Two long, narrow lancet windows, now blocked up, probably indicate the original character of the whole structure. The large east window is divided into three lights by mullions and intersecting tracery in the head, into the two largest openings of which plain circles are inserted. Still simpler is the arrangement in the smaller windows on the south side. They are divided into three lights, the mullions forming pointed heads at the two side lights; but instead of being continued so as to form intersecting tracery in the central space, a large circle is inserted between the pointed heads of the side lights, the lower segment of which finishes the head of the central light by its inverted curve. In this extremely simple combination may be traced the rudiments of the beautiful and richly decorated window in the south transept of Melrose Abbey. The same mode of filling up the head of the window with circles inserted in the intersecting tracery, may be seen on a large scale in the two great windows of the west front of Paisley Abbey, founded by Walter, the second of the family, Steward of Scotland, about 1163,[2] for monks of the Cluniac order of reformed Benedictines. It likewise occurs in some of the original windows of Glasgow Cathedral; while the partial development of the same simple combinations into intricate and beautiful forms is most happily illustrated in the tracery of the south side of the nave, evidently an insertion of later date than the building, the north windows of which remain unaltered.

[1] However the proposed nomenclature of English ecclesiologists may answer their native style, it is impossible to adapt it to Scotland. First-pointed is undoubtedly preferable to Early English, when we can shew still earlier Scottish. Middle-pointed, however, is a most inconvenient and unsuitable term to our Scottish Decorated, where many of its most characteristic forms are circular; and Third-pointed becomes a misnomer, where, as in the nave and transept of South Queensferry the only pointed arch is a small plain benatura on the east side of the door, which is placed on the south side of the nave. The windows are square-headed, and the door round-headed. The roof has been open timber work.

[2] Regist. Monast. de Passelet. Preface.

A decorated window in the west gable of Paisley Abbey, belonging to a period fully a century later than the lower portion of the same front, exhibits the preference for the circular instead of the ogee arch, which would have been combined with the other features of its tracery in any English example of the style. The round-headed light is found to prevail alike in the plainest and the most ornate tracery, from the abandonment of the First-pointed style about the middle of the thirteenth century, till the final close of Scottish medieval ecclesiology in the troubled reign of James V. The curious but remarkably simple window figured here is one of the original ones in the nave of the beautiful little collegiate church of Corstorphine, near Edinburgh, founded by Sir John Forrester in 1429.



But it is not in such minor features as tracery heads only that the rounded arch is employed. Throughout the whole period from the introduction of the Scottish geometric Gothic, in the reign of William the Lion, till the abandonment of medieval art, it continued to be used interchangeably with the pointed arch wherever convenience or taste suggested its adoption. In the triforium of Paisley Abbey one of the most remarkable examples occurs of its use in common with the later form of arch in the main features of the architectural design. Corresponding in breadth to each bay of the nave is a large semicircular arch spring from short clustered columns, with moulded capitals, nearly resembling those of the plainer First-pointed pillars of the nave. The rich mouldings of the triforium arch are recessed to the same depth as the pointed arches below, and are again subdivided by a slender clustered column into two pointed and cusped cinquefoil arches, with a quaterfoil in the space between. A similar arrangement, though executed in a less ornate style, occurs in the nave of Dunkeld Cathedral, the work of Bishop Robert de Cardeny, 1406,[1] while the practical end in view may be observed in the nave of Holyrood Abbey, where a constructive semicircular arch is thrown from pillar to pillar at the same elevation, though there concealed by the triforium screen. The object in both

[1] Vitae Episcoporum Dunkel., p. 16.

cases obviously was to throw the principal weight upon the supporting columns of the centre aisle. These examples serve to shew the interchangeable use of the round and pointed arch by the Scottish architect as it best suited his purpose, or harmonized with the general arrangements of his design. So also in the doorways, the clere-story windows, and the tracery, the rounded arch is systematically used in the Scottish Decorated period interchangeably with the later pointed forms. But the taste for rounded forms also manifests itself in other ways: in circular turret stair-cases, as at Linlithgow, and formerly in that attached to the beautiful south porch of St. Giles's, Edinburgh; and again in the vaulted roofs of belfry towers, where the converging ribs meet in a large open moulded circle, as at St. Giles's, Edinburgh, St. Michael's, Linlithgow, the collegiate churches of Seton and Torphichen, and till recently in the rich groining, springing from large half figures of angels bearing shields and scrolls, of the plain west tower of Glasgow Cathedral,—most injudiciously removed to restore the west front to a uniformity which but poorly repays the idea of size and elevation formerly conveyed by the contrast between the central and west towers.

Examples of the semicircular-headed doorway are of constant occurrence throughout the whole Scottish Decorated period, accompanied with the utmost variety and extent of decoration. The west door of the Abbey Church, Haddington, is a very pleasing example of two orders repeating the favourite roll-and-fillet moulding, with a deep hollow between filled with floriated decoration. It is divided into two doorways by a central shaft, and both it and the jam-shafts have richly floriated capitals and moulded bases. The triple, round-headed windows of the tower, and indeed the whole style of its decoration, are no less markedly characteristic of the peculiarities of the Scottish Decorated period. A still more beautiful doorway, of similar construction, formed, till the year 1829, the entrance to a chapel added to the south aisle of the collegiate church of St. Giles at Edinburgh in 1387. It is now rebuilt between two of the pillars of the central tower, but shorn of many of its finest adjuncts. Similar illustrations might be greatly multipled, as in the vestry door of the cathedral at Iona, filled in with a trefoil arch; in the beautiful cloister doorway of Melrose Abbey; in the gracefully proportioned priests' door of the collegiate church of Seton, on the south side of the choir, adorned with the arms of Sir William Seton on a shield couche, about the year 1400, but more probably the work of his son, who was buried there in

1441; and in the richly decorated south doorway of Holyrood Abbey, with ogee canopy, and flanking buttresses, the work of Abbot Crawfurd about 1458. The same form of doorway was to be seen, accompanied with several varieties of detail, in the collegiate church of the Holy Trinity at Edinburgh, founded by Mary of Gueldres, the widow of James II., in 1462, and recklessly demolished in the progress of the North British Railway operations in 1848. In some respects this was the finest example of late decorated work in Scotland. The entrance from the north transept to the chantry chapel, latterly used as the vestry, was by a neat round-headed doorway, with a simple roll-and-triple-fillet moulding, with a broad hollow externally running continuously round the arch, and with a hood-mould enriched with flowers in the hollow, springing from moulded corbels.

Another small round-headed doorway, with a similarly decorated hood moulding, but with engaged jam-shafts with moulded capitals and bases, latterly blocked up, had formed the entrance to the north transept; and a large one, of like construction, but with the rich mouldings in the jams carried round the head of the arch, without capitals, was placed within a groined porch formed in the angle of the south transept, and formed the principal entrance to the church. The decorations of this fine doorway consisted entirely of a series of filleted quarter-roll mouldings, continued round the recess of the doorway without any break. The most beautiful portion of the whole building was the richly decorated groined roof of the choir and apse, with its vaulting shafts springing from corbels sculptured into all manner of grotesque forms of imps, grinning masks, and caricatures of monks and friars, such as the one here figured, which projected nearly over the site of the old high altar, as if in purposed mockery of the rites on which it seemed to look down. Yet above these unseemly drolls rose the ribbed groins of the beautiful roof, in its eastern portion especially, hardly to be surpassed in chaste design or elaborately varied details. In this point,

however, it more nearly approximated to the usual arrangement of English roofs, being enriched with clustering ribs and bosses, and divided by transverse pointed arches into vaulted bays. The most striking peculiarity in the Scottish stone roof-work is the use of the single vault instead of the transverse groined vaulting, deemed essential elsewhere to ecclesiastical roofing. In its earliest and simplest forms, as in the choir at South Queensferry, it differs in no way from the contemporary baronial halls, as at Borthwick or Crichton, from which it appears to have been directly derived. It is probable, however, that pictorial decoration was employed to relieve its otherwise bald surface, as was certainly the case in the baronial halls, traces of which still remain both at Borthwick and Craigmillar. It continued in use to the last in this very simple form, where little decoration was required, as in the muniment room of the church of the Holy Trinity at Edinburgh, while the choir of the same building presented one of the chastest and richest specimens of a groined vault in Scotland.

The single vaulted church roof, so like that of the baronial hall, may be very fitly traced to the almost exclusive occupation of Scottish builders, for nearly a century previous to its introduction in military architecture. But while retaining its form they speedily learned to restore it to harmony with the decorated work below. The chapel of St. Mirinus, more frequently termed the sounding aisle, attached to the south side of Paisley Abbey, furnishes a remarkably beautiful specimen of a ribbed roof of this simple form, treated with great variety, and an ingenious adaptation to the variations in the walls from which it springs, which shews how entirely the architect was familiar with this style of vaulting, so little known elsewhere. The choir of the collegiate church of Bothwell, founded by the grim Earl of Douglas in 1398, is another very fine example, in which the richness of details abundantly proves that economy had no influence in the choice of this favourite form of ceiling. Another magnificent specimen of the richest style of Scottish decorated Gothic is Lincluden Abbey, the work of the same grim Earl; but its graceful vaulting-shafts no longer sustain the branching ribs of stone. The choir at Seton is a plainer and less complete example. Only the eastern portion, including the apsé, is decorated with moulded ribs, which spring from sculptured corbels, and meet in the ridge rib, where they are tied by equally fine bosses at the intersections. George, second Lord Seton, is said by the historian of the house of Seton to have "pendit

the choir and biggit the vestry," about the year 1493;[1] but the chronology of this work is manifestly wrong in some places, and is altogether a very unsafe guide for the ecclesiologist. In nearly all those examples no side aisles exist, and they are indeed very generally confined in Scotland to the largest collegiate and abbey churches, being introduced evidently less for ornament than for use, where an unusual amount of space was required. Occasionally even the semicircular arch is employed in the roof, as in the Lady Chapel at Roslin, where the greater elevation of the pointed arch would be objectionable from its peculiar position. The choir of the beautiful little cross-church of St. Monance, Fifeshire, finished apparently in 1369, furnishes an interesting example of the transition to the transverse vaulted roof, the ridge ribs of the cross-vaults being bent down about half-way from the centre, where they diverge from a boss into three groin ribs, the centre one springing nearly from the top of each window, which is as usual considerably below the vaulted roof. The choir-roof of the collegiate church of the Holy Trinity at Edinburgh, A. D. 1462, may be considered as marking the period when the peculiar Scottish vaulted roof was generally abandoned, though more than one interesting example of its use at later dates remain to be noticed. It is retained in the older portion of the north aisle of the choir of St. Giles's Church at Edinburgh, while the two eastern bays, as well as the beautifully groined centre aisle, the work of the same period as the collegiate foundation of Mary of Gueldres, are in conformity with the newer style.

The same convenience which suggested the use of the round instead of the more elevated pointed arch, also occasionally led to the use of the still more depressed segmental arch, as in the chantry doorway at Bothwell; or even to the two-centred flat arch with segmental curves, as in the great doorway of the beautiful screen and organ-loft at Glasgow, and in a smaller doorway, the work of Abbot Crawfurd, circa 1460, now built into the east arch of the north aisle of Holyrood Abbey. The segmental arch is most frequently employed in monumental recesses, as at St. Bridget's Douglas, St. Kentigern's Borthwick, and in the choir at Seton; but other Scottish churches exhibit the semicircular arch employed for the same purpose, as in the magnificent tomb of Margaret, countess of Douglas, at Lincluden, and in the recesses under the great north and south windows of the transepts at Seton. One of the most beautiful Scottish examples of a late seg-

[1] Historie of the House of Seytoun.

mental arched doorway, which is figured here, is that of the vestry or chantry chapel of Bothwell Church, Lanarkshire.

Bothwell Chantry Door.

The window tracery of the same period, and accompanying the other features of the Scottish Decorated style already described, partakes of the like character and forms. The pointed window-head is subdivided by round-headed lights, and these again are filled in with foliated details, the result of which is exceedingly pleasing in the best examples, from the striking contrasts produced by the combination of pointed and circular forms, as well as from the flowing tracery frequently resulting from the union of the two, and producing the pear-shaped light which predominates in Scottish Decorated tracery. This latter source of expression has led some writers to describe Scottish tracery as exhibiting an approximation to the French flamboyant style. Nothing, however, can be more unwarranted. The ogee form is almost never designedly adopted, and even seems to be often purposely avoided, as in the Paisley window already cited, and in many similar examples. The window figured below, from the

south aisle of the nave of Dunkeld Cathedral, is a very characteristic example of the mode of introducing the circular and semicircular

Dunkeld Cathedral.

St. Michael's, Linlithgow.

forms, to modify the ogee tracery lines which so greatly predominate in the true French flamboyant. The multiplication of descriptions of minute details of tracery could, however, very partially serve to convey any distinct idea of the peculiar characteristics of Scottish window tracery. The woodcut of one of the windows on the south side of the nave of St. Michael's Church, Linlithgow, may suffice as a characteristic illustration of the most familiar combinations of the style. Another though greatly inferior example of the same class of Scottish Decorated tracery from Melrose, is engraved in the Glossary of Architecture. (*Plate* CCXLVIII., vol. iii.) One remarkable Scottish specimen of ecclesiastical architecture must not be omitted to be noticed, as a singular instance of the local peculiarities developed by the building materials of particular districts. The west front of the cathedral of St. Machar at Old Aberdeen, is chiefly curious as shewing the form which the style assumed when produced with the intractable granite of the country. Its erection dates about 1380-1400;[1] but instead of one large west window, divided by light monials and tracery into nu-

[1] The choir of the cathedral, now utterly demolished, appears to have been the work of Bishop Alexander de Kyninmund, 1356-1380. An interesting indenture relating to

merous lights, the breadth of front is filled in with a series of tall, narrow, lancet-like, but round-headed windows, with no other ornament than a cusped trefoil in the head. The towers on either side are equally simple and unornate, and are chiefly interesting as genuine specimens of granite Gothic, of which the modern town exhibits some more ornate, but greatly less satisfactory examples.

Another peculiar use of the semicircular arch is in clere-story windows, as in the choir of the remarkable little cathedral of Iona, built by Abbot Finlay, in the reign of Robert the Bruce, *i.e.*, prior to 1329;[1] in the nave of Sweetheart Abbey, erected, according to Fordun, in 1275; and in the large collegiate church of St. Michael at Linlithgow, perhaps added after the conflagration of the church mentioned by Fordun as occurring in 1424. The latter windows are divided by a neat mullion into two lights, with trefoliated pointed heads. In this church may be also noted the occurrence of corby-stepped gables, a favourite feature of Scottish domestic architecture, occasionally transferred to ecclesiastical edifices. Interesting examples of the tall, narrow, round-headed window, occur in the private chapel of the neighbouring palace. Among the decorations of Linlithgow Church should also be noted the shields attached to the columns, and wrought into the bosses of the roof. These are of frequent occurrence in Scottish churches. They abound in the beautiful ruin of Lincluden Abbey; and are also employed in a peculiar manner as decorations of the capitals of pillars, where they have frequently an exceedingly bold effect, as in the eastmost pillars of St. Giles's choir at Edinburgh, and also in the Rothesay chapel, in the nave, where large shields, blazoned with royal and noble arms, project from the cardinal faces of the abaci, and overhang the lower mouldings of the capital.

Bishop Kennedy's Arms, St. Giles's.

No mention has yet been made of the celebrated collegiate church of Roslin, founded by William St. Clair, Earl of Caithness, in 1466, because it has hitherto been usual to regard it as an altogether unique architectural monstrosity. It will be seen, however, from the preceding sketch of the most characteristic peculiarities of the Scot-

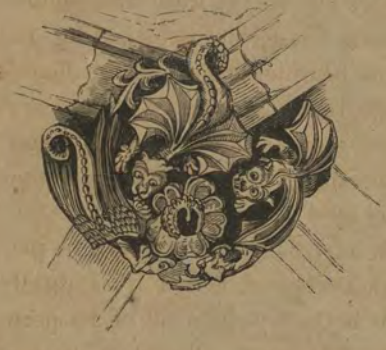
its progress is printed in *Regist. Episcop. Aberdon.* A.D. 1366, vol. ii. p. 59. The same collection contains two Papal bulls, granting indulgences to contributors towards the building of the nave, A.D. 1379, 1380. The succeeding bishop Henry de Lichtoun completed the nave, and built the west towers.

[1] Vitæ Episcoporum Dunkel. p. 13.

tish Decorated style, that many of the most remarkable features of Roslin Chapel are derived from the prevailing models of the period, though carried to an exuberant excess. The circular doorway and segmental porch, the dark vaulted roof, and much of the window tracery, are all common to the style. Even the singular arrangement of its retro-choir, with a clustered pillar terminating the vista of the centre aisle, is nearly a repetition of that of the cathedral of St. Mungo at Glasgow. Various portions of other edifices will also be found to furnish examples of arrangement and details corresponding with those of Roslin, as in the doorway of the south porch and other features of St. Michael's, Linlithgow, and also in some parts of the beautiful ruined church of St. Bridget, Douglas. It is altogether a mistake to regard the singularly interesting church at Roslin, which even the critic enjoys while he condemns, as an exotic produced by foreign skill. Its counterparts will be more easily found in Scotland than in any other part of Europe. It is a curious fact, worthy of note in passing, that only twenty-two varieties of mason's marks occur throughout the whole building, indicating perhaps the number of skilled workmen to whose elaborate art we owe its intricate and endless variety of sculptured details. Among these, notwithstanding the many descriptions and drawings which have been made of the chapel, it is little known that there exist the remarkable series of medieval religious allegories—the seven acts of mercy, the seven deadly sins, and the dance of death: the latter including at least twenty different groups and scenes—as strange a story as was ever told in stone.

From some of the few dates which have been given it will be perceived that the close of the Scottish Decorated period is as totally disconnected with that of England as is the development of its peculiar and most characteristic features. The large collegiate church of St. Giles at Edinburgh, the cathedral of the bishopric during the brief period of the existence of the see, exhibited, till its recent remodelling, a most interesting progressive series of examples of this style, from its simplest to its latest pure state. The destruction of so much of this by the misdirected zeal of modern beautifiers is a source of just regret to the Scottish ecclesiologist, as the dates of many of the additions were ascertainable, and afforded a safe guide in tracing out the gradual development of the style. But enough still remains in the interior to be well worthy of study. The oldest portion is the north aisle of the choir, with its longitudinal vault, shew-

ing what was the style of the centre aisle of the nave previous to 1829, and also of the choir prior to the erection of the present beautiful clere-story about 1466. The date of the north aisle may not improbably be yet ascertained precisely; meanwhile, in the absence of such evidence, its mouldings and other details appear to justify the assignment of its erection immediately after the burning of the church and town by Edward III. in 1355. A charter of David II., dated A.D. 1359, confirms under the great seal the endowment of the altar of St. Catherine there with the upper lands of Merchiston. Like the neighbouring abbey, however, it was repeatedly spoiled, burned, repaired, and rebuilt. In the archives of the burgh a contract is still preserved made in the year 1380 between the Provost and certain masons to vault over a part of the church,—probably the simple but fine ribbed vault of the nave demolished in 1829. A small aisle of two bays, built between the north transept and a fine late Romanesque porch, —only defaced in the latter end of the last century, and finally demolished in our own day,—appeared from its style to be of nearly the same date. The woodcut shews the singular sculptures on one of the bosses in the eastern bay, which appeared from the original painted glass formerly in its window to have been the chapel of St. Eloi, the patron saint of the ancient corporation of Hammermen.



In 1385 the church was again burned by the army of Richard II.;[1] and in 1387, as appears by the agreement with "Johne Johne of Stone and Johne Skayer, masounys," still preserved among the city archives, the five chapels were added on the south side of the nave. One of these included the beautiful porch and doorway already described, which is required by the contract to be "in als gude maner als the durre standand in the west gavyl of ye foresaid kyrk."[2] From this, therefore, we may presume that the great west door—demolished as appears from the burgh records, along with the whole west wall in 1561—was also in the favourite Scottish form of the rounded arch. Various entries in the accounts of the Great Chamberlain of Scotland,

[1] Wyntown, b. ix. c. vii.

[2] Maitland's Hist. of Edin. p. 270.

rendered at the Exchequer between the years 1390 and 1413, shew that the cost of the restoration of the main building had been borne by Government, while the city was engaged in extending it by the addition of a second aisle on the south side of the nave; and to this period there can be no hesitation in assigning the present south aisle of the nave,—closely corresponding in style to the five chapels built in fulfilment of the contract of 1387. The next addition was a second aisle added to the north side of the nave, forming two bays to the west of the ancient Romanesque porch defaced in 1760. This beautiful little fragment still remains, with its light and elegant clustered pillar adorned with large blazoned shields on a rich foliated capital, from which spring the ribs of its groined roof and the arches which connect it with the adjoining aisle. The heraldic devices on the shields supply a clue to the date as well as to the singularly interesting associations connected with this portion of the church, from which I have given it the name of the Rothesay Chapel. They consist of the arms of Robert Duke of Albany, second son of Robert II., and of Archibald fourth Earl of Douglas, two Scottish nobles found acting in concert only on one other occasion, when David Duke of Rothesay was starved to death in the dungeon of Falkland Palace, A.D. 1401. It seems only a legitimate inference to assume that this chapel may have been founded by them as an expiatory offering for that dark deed, and a chaplain appointed to say masses at its altar for their own and their victim's souls. A Parliament holden at Holyrood, 16th

Rothesay Chapel, St. Giles.

May 1402, enacted the solemn farce of examining them as to the causes of the prince's death, and a public remission was drawn up under the King's seal, declaring their innocence in terms which leave no doubt of their guilt.[1] It amply accords with the spirit of the age to find the two perpetrators of this ruthless murder, after having satisfied the formalities of an earthly tribunal, proceeding to purchase peace with heaven.

The next addition to the Collegiate Church was the Preston aisle, added to the south side of the choir by William Prestoune of Gortoune in 1454, agreeably to a charter setting forth the great labour and charges of his father, "for the gettyn of the arme bane of Saint Gele—the quhilk bane he freely left to our moyr Kirk of Saint Gele of Edinburgh." The curious charter has been repeatedly printed.[2] The chaste and highly decorated groining of this portion of the church shews the progress of the style, which is still farther illustrated by the beautiful clere-story and east bays of the choir, added about the year 1462,[3] at which time the burgh records furnish evidence of considerable work being in progress. The latest addition to the metropolitan church, with the exception of the rebuilding of the beautiful crown tower in 1648, was the addition of a third aisle of two bays, in 1513, between the south transept and the porch erected on the south side of the nave in 1387. This formed a chapel dedicated to the Virgin Mary and Gabriel the Archangel. It was an example of great value to the Scottish ecclesiologist, as shewing the adherence to the Decorated style, and its increasingly elaborate yet chaste adornment with richly sculptured groining, at that late period, one hundred and thirty-six years after the date assigned by Rickman for its abandonment in England. Unhappily only a mutilated fragment of this most interesting addition to the building survived the operations of 1829. The favourite and beautiful Scottish crown towers must also be noted, still preserved in St. Giles's, Edinburgh, King's College, Aberdeen, and the Tolbooth of Glasgow, but once also surmounting the towers of St. Michael's, Linlithgow, the Abbey Church of Haddington—styled from its beauty the Lamp of the Lothians—and also,

[1] Tytler, vol. ii. p. 427. Hume of Godscroft's House of Douglas, p. 118.

[2] Archæol. Scot. vol. i. p. 375.

[3] The armorial shields on the pillars include the Royal arms, those of France, of the Queen Dowager Mary of Gueldres, who died in 1462, of the celebrated Bishop Kennedy, of Alexander Napier of Merchiston, comptroller of the household, and vice-admiral of Scotland,—Temp. James I. and II., (erroneously ascribed by me in the Memorials of Edinburgh, vol. ii. p. 162, to the Countess of Lennox,) of Thomas de Cranston, *Scutifer Regis* to James II., &c.

as seems probable from its appearance, the lofty tower at Dundee. Nothing could more effectually demonstrate the total freedom of our native architects from all English influence than this remarkable disagreement in the chronology of the styles practised in the two kingdoms; nor must it be forgot that the passion of the previous sovereign, James III., was for architecture, and that his favourite councillor and companion was his architect, Cochrane, who fell a victim to the jealousy of the rude Scottish barons, excited by the marks of royal favour he received. In no country of Europe was architecture more zealously encouraged than in Scotland during his reign. Our Scottish poet Drummond somewhat quaintly sums up his character in terms more censorious than might have been expected from his own dalliance with the muses: "He was much given to buildings and trimming up of chapels, halls, and gardens, as usually are the lovers of idleness; and the rarest frames of churches and palaces in Scotland were mostly raised about his time: an humour, which though it be allowable in men which have not much to do, yet it is harmful in princes."[1] There was still less need to go to foreign sources for instruction or for artistic models during the prosperous reign of James IV., the favourer of learning and the arts; the patron of our greatest national poets, Dunbar, Kennedy, Gawn Douglas, and others of the Scottish Makars; of Chepman the introducer of the Scottish printing-press; and indeed the encourager of all the most liberal pursuits of a chivalrous age. Under his more popular rule, architecture was encouraged no less royally than in that of his father, and excited the Scottish nobles to emulation instead of jealousy.

Dunbar's noble poem of the THRISSILL AND THE ROIS commemorates the reunion of Scotland and England in the affiancing of James IV. to the Princess Margaret, daughter of Henry VII. of England in 1501; and it is curious to note how completely coincident with this is the manifestation of the influence of English models on the contemporary architecture of Scotland. The Perpendicular or Third-pointed English style appears in Scotland as a mere exotic, too temporarily tried to be properly regarded as a national style, and when used at all, employed contemporaneously with the pure native Decorated work. The earliest, and if I mistake not the only entire example of a Third-pointed building in Scotland is the parish church of Ladykirk, on the banks of the Tweed, built by James IV. in the year 1500. It is

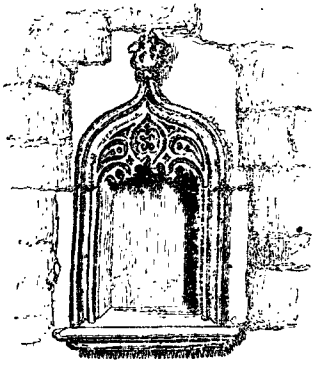
[1] Drummond of Hawthornden's History of the Jameses, p. 61.

a somewhat stiff and formal structure externally, betraying the introduction of an unfamiliar style. In the interior, however, the features of the older native models predominate, and the plain single vaulted arch is especially remarkable in connexion with other details of a style which was wont in the hands of the southern architect to expend its utmost exuberance in pendants, bosses, and fan-tracery on the groined roof. The magnificent perpendicular work of the eastern portions of Melrose Abbey, however, exhibit no such formality or plainness, though probably a nearly contemporary structure. The arms of Andrew Hunter, abbot of Melrose, prior to 1453, are cut on one of the buttresses of the Decorated nave. John Fraser, a later abbot, promoted from Melrose to the see of Ross in 1485, completed the cathedral at Fortrose; the pure and elaborate Decorated work of which admits of no unfavourable comparison with Melrose nave, and shews that we must look to a later date, and most probably to the following century, for the introduction of perpendicular details in the completion of its choir. In the valuable little fragment of the roof of the latter, fortunately still standing, where all else is gone, we once more see the influence of Scottish taste modifying the characteristics of the new style. Here too, instead of the fan-tracery and pendants of contemporary English roofs, is the Scottish single vault, enriched only with additional ribs and bosses, but preserving the favourite feature of carrying the roof completely above the side lights, and making it depend for illumination upon the great east window. The few other examples of Scottish perpendicular work which exist are scarcely sufficient to admit of any general deductions. The semi-hexagonal apse, both at Linlithgow and Stirling, shew it modified at a later date by native peculiarities, derived from the favourite Decorated style, and in the latter—ascribed to Cardinal Beaton—also exhibiting a singular introduction of the round-headed lights of the earlier period, into the tracery of large perpendicular windows, as well as a peculiar adaptation of the Scottish vaulted roof. Both, however, must be regarded as late and somewhat debased examples. Along with these may also be noted the occasional use of the square-headed window, as in the chantry chapel of the church of the Holy Trinity at Edinburgh, and in the clere-story of St. Mary's at Leith, both destroyed within the last few years. The singular church at South Queensferry furnishes a very curious example of some of the features of perpendicular Gothic applied in a novel fashion to an ecclesiastical

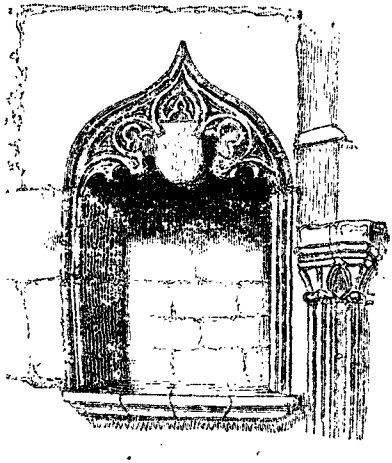
edifice. The north wall appears to have been almost entirely occupied by the buildings of the monastery, so that it is destitute of ornament, and only pierced with one small pointed window of one light at the east end of the choir, near to which a round-headed door—now blocked up—has communicated with the attached buildings. There is no indication of a north transept having ever existed. Both the nave and south transept are entirely lighted with square-headed windows. That of the transept is divided into three lights, neatly cusped in the head. The west end of the nave is furnished with a window in the same style, while the door, which is small and plain, is at the west end of the south side; two other square-headed windows of two lights fill up this side of the nave, and a large and heavy rectangular tower, measuring in greatest breadth, from north to south, across the length of the church, occupies the intersection of the transept with the nave and choir. Altogether the church is more curious than admirable as a late specimen of Scottish medieval art.

While this transient attempt at the naturalization of the English Tudor style of architecture in Scottish art has thus left some few enduring traces, it is worthy of note that its most characteristic feature, the four-centred arch, is nearly, if not quite unknown in Scotland, otherwise than as a modern exotic which figures in the favourite perpendicular rifacciamentos of ecclesiastical façades, wedded too often to the bald church or meeting-house with about as much congruity as the ill-assorted pair that figure in Hogarth's well-known wedding scene. Whatever might have resulted under more favourable circumstances, the new style was destined to no full development in Scotland. By a charter dated 1st August 1513, Walter Chepman, burgess of Edinburgh, memorable as the introducer of the printing-press to Scotland, founded and endowed an altar in the south transept, or "Holy Blood Aisle" of St. Giles's Church, "in honour of God, the Virgin Mary, St. John the Evangelist, and all saints." It was a period of national happiness and prosperity, in which learning and the arts met with the most ample encouragement. 'Only one brief month thereafter all this was at an end. James and the chief of his nobles lay dead on Flodden Field; Scotland was at the mercy of Henry VIII.; the Crown devolved to an infant; and faction, ignorance, and bigotry replaced all the advantages of the wise and beneficent rule of James IV. It is not by slow degrees, but abruptly, like the unfinished page of a mutilated chronicle, that

the history of Scottish medieval art comes to an end. Yet the favourite forms and mouldings of the Decorated Period lingered long after in the domestic architecture of the country. The ornamental ambries found in the castellated mansions, and even in the wealthier burghal dwellings of the sixteenth and seventeenth centuries, partake so much of the character of earlier ecclesiastical features, that they are frequently described as fonts, stoups, or piscinæ; and even when standing, as is their usual wont, by the side of the huge old fashioned fire-place, they have been assumed to afford evidence that the domestic halls and kitchens of our ancestors were their chapels or baptistries. Some few of these relics of obsolete tastes and manners still linger about the old closes of Edinburgh, though now rapidly disappearing before the ruthless strides of modern innovation. The vignette shews the form of one of these ornamental ambries from a singular antique mansion in the Old Town of Edinburgh, which bore the date 1557, and was believed to have been occupied for a time as the residence of the Queen Regent, Mary of Guise. Another large chamber in the same building bore evidence of having been at one time used as a private oratory, and in it was a curious and still more highly decorated niche, which, however, exhibited somewhat of the debased excesses pertaining to that closing period in which the pure Gothic passed into the picturesque but lawless style of the Elizabethan age. Nevertheless its pierced stone-work served to illustrate the lingering adherence to the earlier national style of window-tracery far down into the sixteenth century.



Ambry, Kennedy's Close.



Ambry, Guise Palace.

Into the characteristics of the later baronial and domestic architecture of Scotland it is impossible to enter here, though some of their peculiarities well merit the increased degree of attention they are now receiving. The picturesqueness of the turret stairs, with their lintels decorated with monograms and armorial bearings, and inscribed with quaint legends and pious mottos; the crow-stepped gables, finials, and dormer windows, and the singular overhanging carved "timber lands" of the old streets and closes of Edinburgh, are familiar to all. Some of their features might still be borrowed with advantage to our modern street architecture; but for the most part they are only valuable as the memorials of a period and state of society which has for ever passed away.

Monogram Blyth's Close.

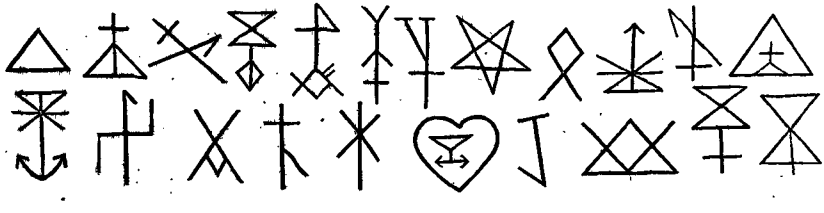
Before quitting the interesting subject of medieval architecture as developed in Scotland, some notice of the ancient and mysterious fraternity of Free Masons seems necessary in order to embrace one important source of that singular progressive unity of purpose traceable throughout the various stages of medieval ecclesiology. While Free Masonry was denounced in many countries of Europe, and was placed for a time under the ban of the law by Henry VI. of England, its chief protector, it appears to have met with no check or restraint in Scotland; and having been made the subject of special royal favour by James I., it has ever since continued to be cherished here with greater zeal than in almost any other country of Christendom. With its modern existence, however, apart from the practice of the art, we have here as little to do as with its extravagant claims to an antiquity nearly coeval with the art of building. We can trace the association of masons into guilds or corporations in some parts of Europe at the very dawn of medieval art. In Lombardy such a free guild of masons was established in the tenth century; and the craft is believed to have first obtained footing in England under the Saxon king, Athelstane, about the same period.[1] In Normandy we only discover the rise of such an association in the middle of the twelfth century; but the practice of secret combination obviously emanated from an ecclesiastical source. The whole system of guilds originated, in part at least, in the necessity of preserving and extending such speculative and practical knowledge as may now be safely committed to the press. Such a security for the safe keeping of traditional

[1] Antiq. of Free Masonry in England. J. O. Halliwell, Esq.—Archæol. vol. xxviii p. 444.

knowledge was specially required in regard to architecture, which depends so entirely on combined operations, and needs the assistance of the chief branches of science which were carried to any perfection during that period. The whole decorative arts of the medieval era were subordinate to architecture, and it was essentially the handmaid of the Church. Ecclesiastics were at once its patrons and the chief practisers of its highest branches, so that the establishment of an order which embraced within its fellowship all the practical artificers as naturally sprung from the requirements of the Church as its various monastic fraternities. Hence, wherever any great ecclesiastical work was to be carried on, a guild of masons was organized, which no doubt soon embraced practitioners of every requisite branch of art. Accordingly we still find in Scotland that the oldest masonic lodges are at Dunfermline, Elgin, Melrose, Kilwinning, Arbroath, Glasgow, and other sites of remarkable early ecclesiastical edifices, while generally some parish churches or other minor ecclesiastical edifices still exist within the surrounding district, betraying traces of the same workmanship as the parent edifice. To the oneness of belief by which medieval Christendom was held together under its common head, and to the practical unity of the ecclesiastical corporation which constituted the Church, apart from the laity, may be traced the rise and gradual development of the successive styles of Gothic architecture. But to the operations of the masonic lodges within their several districts must be ascribed the local peculiarities and provincialisms which may be detected grouping around almost every great abbey or other remarkable ecclesiastical structure. The geographical and political isolation of Scotland, which gave to its Church a degree of independence unknown to most other countries of Papal Christendom, as well as its very partial share in the great movements of medieval Europe, including the crusades, all tended to give additional importance to those local influences which in other countries were more subordinated by external sources of change. To this source, therefore, we can hardly err in referring much of the peculiar character ascribable to Scottish Ecclesiology, which it is attempted here to reduce to some system.

The revived interest in the study of medieval architecture, added to the happy substitution of investigation for the older and more convenient practice of theorizing, have led to considerable attention being directed to the singular marks or symbols, apparently the

works of the original builders, which are observable on all ancient churches. That masons' marks are old as the building of the Pyramids is undoubted. They were discovered by Colonel Howard Vyse on forcing his way into the chambers of construction of the great pyramid, where there cannot be a doubt no human being had been before since the completion of its vast masonry. Similar marks have also been observed on Roman altars and on structures of an equally early era. The most, however, that can now be inferred from such is the invariable practice of each workman marking the stone he had cut, which remains in use in our own day to distinguish the work of different individuals. But much more than this appears to be deducible from the medieval masons' marks. "The fact that in these buildings it is only a certain number of the stones which bear symbols; that the marks found in different countries (although the variety is great) are in many cases identical, and in all have a singular accordance in character, seems to shew that the men who employed them did so by system, and that the system, if not the same in England, Germany, and France, was closely analogous in one country to that of the others."[1] The observation and collation of these marks have accordingly become objects of interest, as calculated to aid in the elucidation of the history of the medieval masonic guilds. It is not, however, sufficient merely to detect the occasional identity of single mason-marks on different and widely distant buildings. The following, for example, includes, I believe, the entire set of mason-marks to be found on Roslin Chapel. Of these the first,



Δ, is only to be found on the altars and piscinæ, and the two adjoining ones around the doors. A comparison of these with the mason-marks of Gloucester Cathedral, Malmsbury Abbey Church, Furness Abbey, &c.,[2] will shew that several of the symbols are common to

[1] "On certain marks discoverable on the stones of various buildings erected in the Middle Ages." By G. Godwin, Esq.—Archæol. vol. xxx. p. 117, accompanied with plates of masons' marks.

[2] Archæol. vol. xxx. Plates VI. VII. IX. X.

all these; but this can lead to no conclusion. Many of the subordinate lines added to regular figures are still recognised among the craft as additions given to distinguish the symbols of two masons when the mark of a member admitted from another lodge was the same as that already borne by one of their own number. If, however, the entire series, or the greater number of the marks on one building could be detected on another apparently of the same age, it would be such a coincidence as could hardly be ascribed to any other cause than that both were the work of the same masonic lodge. I should anticipate, for example, that such would be found to be the case, to some considerable extent, on the oldest portions of Dunfermline and Lindisfarne Abbeys, and Durham Cathedral. The united cooperation of a very few zealous labourers may soon bring such a question to the test, if sufficient care is taken to discriminate between the original work and the additions or alterations of subsequent builders. Meanwhile, when so much zeal is displayed in the collection of Roman potters' stamps, medieval pilgrims' signs, tradesmen's and tavern tokens of the seventeenth century, and even the more recent provincial copper coinage, it may suffice to suggest that the collection of complete sets of mason-marks from ecclesiastical edifices,—discriminating those belonging to portions of different dates,—may furnish a clue to the influence of masonic guilds on the development of successive styles, or the prevalence of remarkable provincial peculiarities.

We obtain from Father Hay's "Genealogie of the Sainte Claires of Rosslyn," a curious account of the assembling of the needful band of artificers for the building of the collegiate church founded by William Saint Clair, Earl of Caithness:—

"His adge creeping on him," says the genealogist, "to the end he might not seem altogither unthankfull to God for the benefices he receaved from him, it came in his minde to build a house for God's service, of most curious worke, the which that it might be done with greater glory and splendor, he caused artificers to be brought from other regions and forraigne kingdomes, and caused dayly to be abundance of all kinde of workemen present: as masons, carpenters, smiths, barrowmen, and quarriers, with others; for it is remembered that for the space of thirty-four years before, he never wanted great numbers of such workmen. The foundation of this rare worke he caused to be laid in the year of our Lord 1446; and to the end the worke might be the more rare: first he caused the draughts to be drawn upon Eastland boords, and made the carpenters to carve them according to the draughts thereon, and then gave them for patterns to the massons, that they might thereby cut the like in stone. . . . He rewarded the massones according to their degree."—Genealogie of the Sainte Claires of Rosslyn, p. 26.

From this curious notice it would seem that the Earl was himself the chief designer and architect to whose ingenuity and inventive skill we owe the remarkable and unique example of masonic art which still remains at Roslin. Nor is this at all improbable. He was devoted to building, in an age in which it became one of the most favourite pastimes, and indeed engrossing pursuits of the Scottish kings. The Saint Clairs continued, according to some authorities, from this early date to be recognised as the chiefs of the whole body of Scottish Free Masons, till in 1736 William St. Clair, Esq. of Rosslyn, resigned into the hands of the Scottish lodges the hereditary office of Grand Master, which, however, he continued to hold till his death. The evidence of the creation of this office in the person of the founder of the collegiate church of Roslin is defective, and the entire narrative of Father Hay must be received with caution, though professedly derived from original manuscripts. Of the existence, however, of the hereditary office of Grand Master in the younger branch of the St. Clairs, which terminated on the death of William St. Clair of Rosslyn in 1778, there can be no question; and of the early connexion of the St. Clairs with the masonic fraternity, there seems equally little reason to doubt. On this account, therefore, the set of mason-marks given above from the remarkable memorial of their masonic skill which still exists at Roslin, possesses peculiar interest. While, however, we find in Father Hay's curious notice that artificers were brought from foreign kingdoms, that is not to be misunderstood as indicating that either the design or entire execution of this remarkable edifice is to be ascribed to a foreign guild. The same was done by Wykeham, in order to secure the perfect execution of his own magnificent designs, and in one or two of the mason-marks the additions may be traced which probably indicate the admission of a stranger using, *with a difference*, the symbol already belonging to some brother of the local guild. The very small number of varieties, however, is remarkable, though it of course only embraces one class of the numerous artificers employed. The conclusions indicated by the traditions of the craft, and the direct evidence which their works supply, seem equally opposed to the ideas too hastily adopted by some enthusiastic elucidators of medieval free masonry, that travelling lodges continued to perambulate Europe, devoting their artistic skill to supply the wants of the universal church, so that we might look for precisely the same details being repeated in contemporary works of

the Norman architects of Sicily and of the Orkney Islands, or of Drontheim. We do indeed find in the eighth century the Pictish king sending for builders to rear a fitting edifice at Abernethy after the Roman manner, and, to the last, skilled artificers were doubtless sought far and near—with the ready facilities for foreign correspondence which the Church then exclusively possessed—whenever any work of unusual importance was to be executed; but long before the sons of St. Margaret had commenced their magnificent foundations, the corresponding demands for the aid of the free mason in every country of Christendom had removed all necessity for the maintenance of peripatetic missionary guilds. The order, however, flourished under this abundant patronage; nor did the localization of its guilds interrupt that mutual recognition of members of the privileged fraternity by means of which Gothic architecture continued for upwards of four hundred years to be a living art, expanding and developing itself under ever varying but progressive forms of fitness and beauty.

We have witnessed in our own day an attempt to resuscitate medieval architecture by a retrogression altogether opposed to the spirit of the old builders, in whose hands it grew like a thing of life that returns not upon the work of earlier years. Its results have been of value in securing the restoration of many crumbling memorials of the past; and in Scotland our best architects have yet much to learn in the same reverent spirit, ere we can hope to see our national historic monuments of medieval art preserved, instead of being defaced and obliterated by the superinduction of spurious French or Anglo-Gothic details—a restoration that "means the most total destruction which a building can suffer; a destruction accompanied with false description of the thing destroyed."[1] But a national style of architecture was never reproduced by such means. It must grow up like the oak, unforced and in its native soil; and, when thus originating, its living forms become the embodiment of the polity, social history, and religious faith of the nation. Yet architecture is on this very account essentially a practical art, and even in the most gorgeous medieval cathedral a sense of fitness, and ideas of direct utility, may be traced as controlling powers influencing the whole design. From this overruling utilitarian spirit sprang the element of picturesqueness, which we look for in vain in modern Gothic. The old cathedral or abbey has here a chapter-house, there a transept or cloister, a chantry chapel, vestry, or

[1] Ruskin's Seven Lamps of Architecture, p. 179.

porch, introduced simply because it was required, though harmonized with all the skill of a perfect artist into an integral part of the architectural design. In the modern Gothic everything is balanced, proportioned, and reduced to strict rule and formality, but it is lifeless as the men of the old centuries to which it properly belongs. As to modern Protestant cathedrals, with "long-drawn aisles," constructed for no possible end connected with the worship for which they profess to be designed, they are manifest absurdities, which proclaim the lifelessness of the art in which they have originated. The national peculiarities traceable in medieval architecture are among the most remarkable evidences that it was a living art. Like a transplanted flower, it was modified everywhere by the soil and climate: the classic elements which are seen pervading that of Italy; the substantial yet ornate but impure grandeur of that of Spain; the compact, consistent, harmonious completeness of that of Germany; the rich but lawless exuberance of the French Flamboyant; the stately progression of the beautiful English Decorated into the profusely overlaid, yet still strictly defined Perpendicular; and the massive but comparatively plain and unchanging Scottish Decorated—all manifest peculiarities which pertain to the several nations with which they originated. "The essential modifications of architecture in each age and country must depend in part on the natural materials, localities, and in part on the artificial forms, social, civil, and religious, on the acquired habits and manners of the peculiar nation for which it labours, and the changes in these must produce corresponding variations in architecture."[1] The revivalist who seeks to reproduce the creations of the past in defiance of these manifest laws by which they existed in harmony and just adaptation to their geographical or social adjuncts, will find his self-imposed task not much less hopeless than to reanimate the fossil Mastodon or Dinotherium. But meanwhile the geologist, without seeking to reanimate these extinct vertebrata, learns much regarding the past from the investigation of their colossal remains, and so too may the archæologist see into the living spirit of the medieval era by the earnest study of its creations, though he hopes better things of his own age than that it should expect perfection in those immature centuries, or seek for life in the beautiful sepulchres wherein they lie entombed.

The consecutive view given above of the progressive development

[1] Hope's Historical Essay on Architecture, p. 458.

of the various styles of ecclesiastical architecture, accompanied as it is with some few elements for the construction of a chronological series of examples, is sufficient, at least, to bear out the views advanced in reference to the independent character and individuality of Scottish Ecclesiology. It would be easy to multiply references to examples of the various peculiar features referred to, but what is far more wanted is the ascertainment of a larger number of well authenticated dates of existing work. Even of the cathedrals and great abbeys scarcely anything is known, though now that so many of the Scottish chartularies are published, and as a valuable adjunct to them, their seals are being systematically described, we may hope to discover, by a comparison with the armorial sculpture of our ecclesiastical structures, a sufficient number of dated examples by which to test the whole. Meanwhile, the following table is offered with great diffidence, and merely as some probable approximation to the true chronological arrangement of the Scottish styles, placing alongside of it the English classification of Rickman, as adopted with some later modifications, in the Fifth Edition of the Glossary of Architecture, to shew the extent of coincidence or disagreement. I shall be glad to find it speedily superseded by a system much more complete; but anything which supplies the elements of a recognised nomenclature and orderly classification will be of some use as a help towards co-operation among Scottish ecclesiologists. The styles distinguished here as *First-pointed* and *Geometric* are to some extent synchronous, depending perhaps on the native or foreign education of the ecclesiastics by whom the works were prosecuted;—a remarkable circumstance, and probably without a parallel in the history of medieval art. We find William de Bondington of Glasgow, for example, in the last year of his episcopate, adopting the ritual and customs of Sarum as the constitution of his cathedral.[1] It need not therefore excite our surprise to find the portion of the nave executed under his superintendence bearing an equally close affinity to the Sarum model, then in progress. Scottish First-pointed differs very little from the Early English, whereas the Scottish Geometric has no parallel elsewhere, and in Scotland entirely superseded the other at a very early date. It is, therefore, manifestly indispensable to the prosecution of Scottish Ecclesiology, that what is peculiar to it shall receive a nomenclature of its own. It can only lead to uncertainty and confusion to

[1] Registrum Episcopatus Glasguensis, vol. i. p. 166.

continue to apply the term First-pointed[1] to such work as the east end of St. Magnus's Cathedral, where not only the pier and triforium arches are semicircular, but even the arch of the great east window is filled in with a rose of twelve leaves, and being left unpierced above, it is practically a round-headed light. A much more elaborate treatment of the subject would be necessary than is possible within the limits of a single chapter, in order to shew the peculiar mouldings and other characteristic details. In the Scottish Decorated, for example, cylindrical and octagonal piers are by no means uncommon; both pier arches and windows are very frequently composed simply of two or three plain chamfer orders. Square-edged hood-mouldings and string-courses are also common; and in the more ornamental piers the double-roll, and the roll and fillet mouldings almost invariably predominate. In the windows also—among the most expressive features of every style of Gothic architecture—one harmonious feeling is observable throughout the endless varieties of tracery, giving to them a national aspect not less marked than the physiognomy of their builders. The most prevailing characteristics are well represented in the example figured above, from one of the beautiful series of St. Michael's, Linlithgow. Similar windows, though varying in detail, occur at St. Monance, Fife, St. Mary's, Leith, at Mid-Calder and Duddingston, in the Abbey Church, Haddington, in the collegiate churches of Seton, Crichton, and Roslin, in Melrose Abbey, and the ancient church tower of Dundee. They also existed in both the collegiate churches of St. Giles and the Holy Trinity at Edinburgh; and are even found amid the traces of declining art in the beautiful chapels of King's College, Aberdeen, and Heriot's Hospital, Edinburgh—the latter of which has been assigned, without a shadow of evidence, as the work of Inigo Jones, the architect having in reality been William Wallace, styled in the treasurer's accounts and other authentic documents relating to its erection, by the old name of Master Mason. Such are some of the genuine characteristics of our native styles; but at Dunfermline, Dunblane, Corstorphine, and wherever the hand of the modern restorer has been, we find them displaced by perpendicular tracery, English mouldings and details, and the like evidences of irreverent ignorance.

[1] It is so described in the "Ecclesiological Notes on the Isle of Man," &c., an interesting and intelligent note-book, (p. 96); but no reader would ever guess from the description, that excepting in some of the minor details, it bears no resemblance to any known specimen of English First-pointed work.

SCOTTISH ECCLESIOLOGY.				ENGLISH.		
Reign.	A.D.	Style.	Examples.	Reign.	A.D.	Style.
Kings of the Northern and Southern Picts,	400—843	Scoto-Italian.	St. Magnus, Egilshay.	Heptarchy.	457—800	
Kenneth MacAlpin to Malcolm Canmore,	843—1057	Scottic.	Round Tower, Abernethy. Round Tower, Brechin.	Egbert to Harold II.	800—1066	Saxon.
Donald Bane, Edgar, Alexander I. David I. Malcolm IV. William the Lion,	1093 1097 1106 1124 1153 1165—1170	Romanesque, 1070—1170, prevailed about 100 years.	Dunfermline Abbey—Nave. Inchcolm Abbey—part of the Dormitories. St. Rule's Church. Jedburgh Abbey. Kelso Abbey. Dalmeny Church. Leuchars Church.	William I. William II. Henry I. Stephen. Henry II.	1066 1087 1100 1135 1154—1189	Norman, or English Romanesque, prevailed about 124 years.
William, Alexander II. Alexander III.	1170—1214 1214 1249	First-pointed, 1170—1242, prevailed about 70 years.	Glasgow Cathedral—Crypt and Choir. Dunblane Cathedral—Nave. Kilwinning Abbey. St. Blane's, Bute—the Chancel.	Richard I. John. Henry III.	1189 1199 1216—1272	Early English, prevailed about 100 years.
Margaret, Maid of Norway, John Baliol, Interregnum,	1285 1292—1296 1296—1306	Scottish Geometric, 1178—1285, prevailed about 100 years.	Aberbrothoc Abbey. Paisley Abbey—Nave. Kirkwall Cathedral—east end of Choir. Sweetheart Abbey, Kirkcudbright.	Edward I. Edward II. Edward III.	1272 1307 1327—1377	Decorated English, prevailed about 100 years.
Robert I. David II. Robert II. Robert III. Regency of Albany, James I. James II. James III. James IV.	1306 1329 1370 1390 1407 1424 1436 1460 1488—1500	Scottish Decorated, 1300—1500, prevailed about 200 years.	Dunkeld Cathedral—Nave Aisles. Melrose Abbey—Nave. Fortrose Cathedral. St. Monance Church, Fife. Bothwell Church. Lincluden College. St. Michael's, Linlithgow. Trinity College, Edinburgh.	Richard II. Henry IV. Henry V. Henry VI. Edward IV. Edward V. Richard III. Henry VII.	1377 1399 1413 1422 1461 1483 1483 1485	Perpendicular English, prevailed about 169 years.
James IV. James V.	1500—1513 1513	Perpendicular, 1500—1513.	Melrose Abbey—Chancel. Ladykirk.	Henry VIII.	1509—1546	

CHAPTER VIII.

ECCLESIASTICAL ANTIQUITIES.

NOTWITHSTANDING the systematic eradication of every relic associated with the rites or dogmas of the old faith, carried on by the Scottish Reformers of the sixteenth century, ecclesiastical remains are still preserved in sufficient number to furnish out a much ampler list than the limits of this work can embrace. The recumbent effigy, for example, is to be met with in many districts of Scotland, sometimes mutilated and defaced, but not unfrequently still exhibiting evidences of refined taste and delicacy of manipulation pertaining to the best epoch of medieval art. Perhaps no work of the period is more characteristic of the change from the age of the tumulus builders than the recumbent effigy of the Christian knight. It is one of the most significant memorials of the mild influences of a purer faith on the arts and sepulchral rites of the race. The armour and weapons of war are indeed still there, but the sword is in its sheath; the position is that of repose; and not unfrequently the hands are clasped in the attitude of devotion, the symbol of prayer. The majority of these medieval monuments belong to the fifteenth century, and some of those which occur in Iona and the Hebrides are altogether peculiar in costume and style of art. There is little, however, to distinguish the greater number of the Scottish from the English recumbent effigies, unless one peculiarity be worth noting, seeming characteristic of a national luxuriousness which is little applicable to the rude barons of the Scottish middle ages. The crested tilting helmet, which is the most frequent pillow of the recumbent English knight, is of rare occurrence in Scotland, being more generally re-

placed by a richly sculptured cushion. It is needless, however, to multiply illustrations of a point involving no more than a conventional formula of art.[1] Sepulchral brasses, though now almost unknown in Scotland, may once have been little less abundant than the recumbent effigy. The "Oxford Manual" mentions only one, that of the Stuarts of Minto, in the nave of Glasgow Cathedral, bearing the date 1605. To this solitary example, however, one or two additions can still be made. The "restorations" of the collegiate church of St. Giles at Edinburgh in 1829, compassed, among other lamentable defacements, the destruction of the tomb of "The Good Regent," including the brass engraved with the figures of Justice and Faith, and the epitaph from the pen of George Buchanan.[2] The brass has fortunately been rescued, and is preserved in the possession of the Hon. John Stuart, one of the lineal descendants of the Regent, James Earl of Moray, by whom steps have been recently taken with a view to its restoration. A charter granted by the city of Edinburgh to William Preston of Gortoun, in 1454, in acknowledgment of his father's invaluable gift of "the arme bane of Saint Gele," preserves the record of at least one other brass that once adorned the same ancient church, though long since gone, with so many other of its most interesting features. It is described as "a plate of brase, with a writ specifiand the bringing of that relik be him in Scotland, with his armis." A small mural brass still remains in part of the church of St. Nicholas, Aberdeen, known as Drum's Aisle, bearing two shields of arms—the one bearing the three banded bunches of holly leaves for Irvine; and the other three pales for Keith. It surmounted the recumbent effigy of Alexander Irvine, third of the ancient family of Drum, who fell at the battle of Harlaw in the year 1411, and of his wife Elizabeth Keith, daughter of the Lord Robert de Keith. The knight is in full armour, but crowned with a chaplet of flowers, and his feet resting on a lion; while the lady's feet are supported by a dog. The monument has obviously been executed during their lifetimes, from the blanks still remaining on the brass, which tell, amid all the pomp of these anticipatory sepulchral honours, that no pious hand was found to grave the few simple additions requisite to have made of the

[1] A pretty large list of Scottish monumental effigies might still be made. Descriptions of monuments furnished to me by the Rev. J. H. Hughes, and George Seton, Esq., include nearly sixty, many of which contain two recumbent figures, and to these considerable additions might be made, while many more empty niches suffice to shew where others once have lain.

[2] Memorials of Edin. vol. ii. p. 169.

dumb tablet a true memorial of the dead. The imperfect inscriptions are,—

Hic sub ista sepultura jacet honorabilis et famosus miles dns Alexander de Irbyn Secund qd⁹ dns de Droum de Achyndor et Forglen qui obit . . . . die mens . . . anno dni MCCCCC . .

Hic etiam jacet nobilis dna dna Elizabeth Keth filia quan dni Roberti de Keth militis Marescalli Scocie uxoris dci dni dni. Alexander de Irbyn quæ obit . . . die mens . . . Anno dni MCCCCC . .

Principal Gordon, of the Scots College, Paris, describes in his "Remarks on a Journey to the Orkney Islands," made in 1781, the monument of Bishop Tulloch, the brass of which—"a plate of copper full length of the grave"—was carried off by a party of Cromwell's soldiers.[1] More recent plunderers have removed, within the last twenty years, a brass which had escaped the hands of previous devastators of the monastery of Inchcolm, in the Frith of Forth. Nor is it altogether impossible that others may even now remain safe under the protection of more modern flooring, or superincumbent debris. The floor of St. Mary's Church at Leith was removed in the course of extensive alterations effected on it in 1848, and was found to cover the original paving with inscriptions and armorial shields of early date. On the repair and reseating of Whitekirk parish church, East-Lothian, a few years since, a large stone slab, which now lies in the adjoining churchyard, was removed from its original site in the chancel, and disclosed a remarkably fine matrix of what appears to have been the full sized figure of an ecclesiastic, with canopy and surrounding inscription. Similar matrices are even now by no means rare. One of large size lies in the barn-yard of the Abbey Farm, in the vicinity of the ruins of North-Berwick Abbey. Another has been recently exposed within the area of the nave of Seton Church, East-Lothian. Others are to be seen at Aberbrothoc, Dunfermline, and Dunblane, the last exhibiting traces of a large ornamental cross. One of unusual dimensions, which lies in the chancel of the cathedral of Iona, is traditionally assigned to Macleod of Macleod. The representation of the full length figure of a knight in armour may still be traced, with his sword by his side, and his feet resting on some animal. It has been surrounded with an inscription on an orna-

[1] Archæologia Scotica, vol. i. p. 260.

mental border, and tradition adds, was completed by a plate, not of brass but of silver.[1]

Incised slabs are still more common. Some of those at Iona especially are characterized by peculiar beauty and great variety of design. Nearly the whole of the north and south aisles of the nave of Holyrood Abbey are also still paved with incised slabs, including those of various ecclesiastics, engraved with floriated or Calvary cross, and generally with the paten and chalice on each side, or with the chalice only, resting on the long limb of the cross. Roslin Chapel has a curious example of an incised monumental slab, representing a knight in full armour. In the church of Kinkill, Aberdeenshire, Sir Robert Scrimgeour, high constable of Dundee, who fell at the battle of Harlaw in 1411, is similarly pourtrayed at full length; and in the south aisle of the church of Foveran, in the same county, two knights in complete armour are represented on one slab, under an ornamental canopy. Examples also occur at Dalmally and other ancient ecclesiastical sites in Argyleshire and the Western Islands, but these are sufficient to illustrate this class of medieval sepulchral memorials.

Stone coffins are no less abundant, but also rarely marked by any peculiar features; the later Scottish sepulchral rites being no doubt for the most part such as were common to medieval Europe. One of the most interesting discoveries of this class was made during recent repairs of the nave of Dunfermline Abbey. In the centre of the nave, towards its east end, a stone coffin of the form and dimensions of those of the thirteenth and fourteenth centuries was found under the paving. On removing the lid it disclosed a singular leathern shroud, which remained in good preservation, although the body it was intended to protect had long mouldered into dust. The prepared leathern skin is double, and has been wrapped entirely round the body, like the bandages of a mummy; it is laced across the breast, and stitched with a strong leathern thong entirely up the back from the neck to the heels, and along the soles of the feet. It has been removed to the Dunfermline Museum, where it is preserved suspended in a glass case—in some respects a more eloquent *memento mori* than the Egyptian's "imperishable type of evanescence:" a shroud which has escaped the mortality of the corpse within its folds. The coffin has been assigned by local antiquaries as that of Edward, the eldest son of Malcolm Canmore; but there is no evidence to justify

[1] Graham's Monuments of Iona, p. 19. Plate XXXIII.

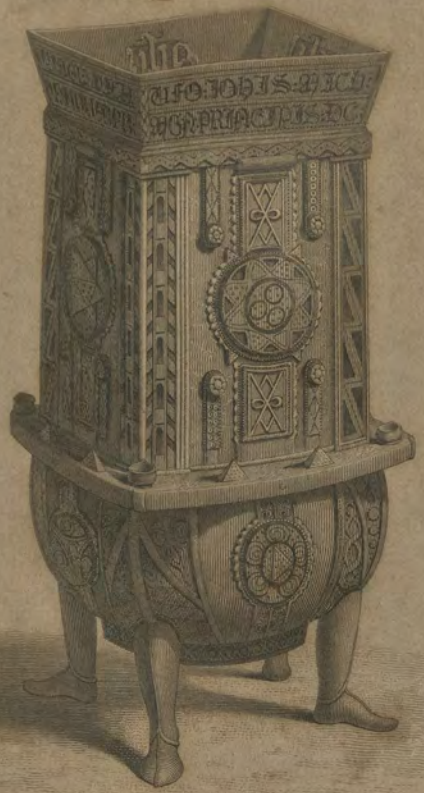
any such conclusion. The high-peaked ridge of the coffin lid would rather suggest a date of fully a century later than that of the death of Edward, A.D. 1093.

Along with these ecclesiastical and sepulchral relics may also be noted the peculiarities of Scottish church-flooring. So far as I am aware, encaustic tiles of figured patterns appear to be unknown in Scotland, though their absence cannot be held as evidence that the art was never practised. So entirely are the floors of every church and abbey altered or destroyed, that it is impossible to speculate on their original character. Glazed tiles of various colours have, however, been occasionally found. During the recent repair of the choir of Kirkwall Cathedral monochromatic orange and purple floor-tiles were discovered; and on the demolition of the collegiate church of the Holy Trinity at Edinburgh in 1848, similar tiles of various colours were dug up from beneath the modern floor of the chantry chapel. But the most remarkable relics of this class are the raised floor-tiles, some interesting examples of which, found in the ruins of North Berwick Abbey, are figured in the "Carte Monialium de Northberwic." They represent, in high relief, lions, leopards, ornamental scrolls, and various geometric and fancy patterns. Other examples of the same class, but of different designs, have also been dug up in the ruined choir of the Abbey Church at Haddington. The relief in some of these amounts to fully the fifth of an inch, and seems ill suited for the purposes of paving; but the worn surfaces of several of the North Berwick specimens, now in the Museum of the Scottish Antiquaries, leave no room to doubt that they had been trod by many feet ere they were buried in the wreck of the ruined abbey.

Charters and missals, with seals, matrices, and ecclesiastical heraldry, might all fitly enough be included under the title of Scottish ecclesiastical relics; but it will sufficiently answer the purpose of this supplementary chapter to glance at a very few of the most remarkable early antiquities of this class. One of the most interesting of these is the beautiful ecclesiastical bell-shrine and bell discovered about the year 1814 on the demolition of a ruined wall on Torrebl[illegible] laurn farm, in the parish of Kilmichael-Glassrie, Argyleshire, and no[illegible] one of the most valued treasures in the Museum of the Scottish A[illegible] tiquaries.[1] This, like every other native relic, has been pronounced to be *decidedly Norwegian*;[2] and with a perversity of logic, which

[1] *Vide* Plate VI. fig. 1.

[2] Dr. Hibbert, Archæol. Scot. vol. iv. p. 119.



D. Wilson, del.

DUNVEGAN CUP.

(height 10½ inches.)

Wm. Douglas, Sculp.

KILMICHAEL-GLASSRIE BELL.

(height 6½ inches.)

multiplies the evil tenfold, the Rev. J. S. Howson, on comparing it with the numerous sculptured crosses of the district, so faithfully described by him in the Cambridge Camden Society's Transactions, and finding that "the scroll-work on the bell-case, and the figure of our Saviour, are closely similar to the corresponding representations on the Argyleshire crosses," jumps to the conclusion that they also must needs be Scandinavian.[1] The very opposite conclusion would seem unavoidable, were it not that this idea of the supremacy of Scandinavian art in Scotland has superseded reasoning, and maintains its ground in defiance of evidence. History leaves no room to doubt that the Scandinavian invaders devastated and destroyed many native works, and greatly retarded the full development of the arts of civilisation of the Scottish Christian era. Scottish antiquaries certainly display a truly forgiving spirit in crediting them with the invention of what little escaped their sacrilegious ravages. I cannot avoid characterizing the supplementary observations on the Kilmichael-Glassrie bell-shrine in the Archæologia Scotica, which have furnished the basis of the later conclusions, as extremely foolish. A woodcut, copied from an edition of King Olave Tryggiason's Saga, printed in 1665, and with a scutcheon of the debased form only introduced in the seventeenth century, is gravely produced as an ancient representation of the Norwegian king, in order that by comparing his crown with that worn by the crucified Saviour on the bell-case, its *decided Scandinavian character* may be seen. The crown is neither more nor less than the common one, surmounted by three *fleurs-de-lis*, which, had a native origin been sought for it, might have been seen along with the Maltese or Greek cross patée, referred to in the same article, on almost any Scottish silver coin from Malcolm Canmore to James IV., when it is for the first time superseded on our native currency by a close crown. It is no less common on contemporary English, and indeed European coins; and as an argument, one way or other in the present question, is utterly valueless. On equally inconclusive grounds the Greek cross patée is pronounced to be Scandinavian. In proof of the thorough consistency of its form with the usages of the early British Church centuries before the first Scandinavian convert had abandoned the Pagan creed of his fathers, it may suffice to observe that it closely corresponds to the beautiful gold cross found in a grave in the Cathedral of Durham, on the breast of an ecclesiastic, believed, at the time of

[1] Transactions Cambridge Camden Soc. vol. i. p. 177.

its discovery, to be that of St. Cuthbert, which would assign it to the seventh century. It is sufficient for our purpose, however, that both its style and the circumstances under which it was discovered equally prove its great antiquity and its native workmanship, points perhaps hardly requiring to be discussed.[1] The "well-known Runic knots" are next quoted, these being what we are familiar with on decorative borders of Irish MSS., some of which date two centuries prior to the first known descents of Scandinavian Vikings on our shores, and which are no less common on Anglo-Saxon MSS. and relics, on Anglo-Norman and Scottish Romanesque architecture, and indeed predominated in the prevailing style of ornament for a time throughout Europe. Lastly, we have a figure copied from an ancient "Runic monument," representing a person ringing a large suspended belfry-bell, measuring—if any proportion is preserved—about three feet in height.[2] This, therefore, can manifestly have no possible bearing on the history of the little Scottish hand-bell, or rather bell-case, which measures somewhat less than six inches high.

It is not difficult to shew that bells were in use in Scotland upwards of four centuries before the conversion of St. Olaf and his Norwegian Jarls. They were indeed introduced by the first Christian missionaries, and summoned the brethren of Iona to prayer, while yet the *gloriosum cœnobium* of the sacred isle was only a few wattled huts. The reference which Adomnan makes to St. Columba's bell, when he had notice that King Aidan was going forth to battle, sufficiently indicates the use of it for that purpose:—"Sanctus subito ad suum dicit ministratorem cloccam pulsa. Cujus sonitu fratres incitati ad ecclesiam ocius currunt."[3] We have as little reason for supposing that the frail currach of St. Columba was

Bell of St. Columba.

[1] Akerman's Archæological Index. Plate XIX. fig. 6.

[2] Archæol. Scotica, vol. iv. p. 122.

[3] Smith's St. Columba, p. 45.

freighted with a ponderous church bell, as that the first monastery of Iona was distinguished by a lofty belfry tower. But the little hand-bell of the primitive bishop would abundantly suffice to summon together the band of pioneers in the wilderness of Iona. If the annexed engraving do not represent the identical bell of the Scottish Apostle, it is one consecrated to him, and sufficiently primitive in its character to have called together the family of Iona to their orisons, beneath the osier groins of the first cathedral of the isles. It is the bell of St. Columbkill, now in the collection of John Bell, Esq. of Dungannon. The original, which measures nearly seven inches in height, was preserved for many generations in the family of the M'Gurks, from whose ancestors the parish of Termon-Maguirk, in the county of Tyrone, takes its name.[1] This bell was held by the native Irish even of the present generation in peculiar veneration, and though usually called by them the *Clog na Choluimchille*, or bell of St. Columbkill, it also bore the name of Dia dioġaltur, or God's Vengeance, alluding to the curse implicitly believed to fall on any who perjure themselves by swearing falsely on it. This bell was used until very lately, throughout the county of Tyrone, in cases of solemn asseveration; but much of its essential virtue must have exhaled on its transference to the repositories of the antiquary. The Kilmichael-Glassrie bell, now in the Museum of the Scottish Antiquaries, appears to have closely corresponded to the simple iron *clag* figured above. Within the beautiful brass shrine figured on *Plate* VI. is a rude iron bell, so greatly corroded that its original form can only be imperfectly traced; yet this, and not the shrine, was obviously the chief object of veneration, and may indeed be assumed with much probability to be some centuries older than the ornamental case in which it is preserved. The name of *Dia Dioghaltus*, or God's Vengeance, specially appropriated to the bell of St. Columba, is applicable to all the relics of this class, which we shall find were among the most venerated objects of the primitive Celtic church.

It remains to be seen if any such ecclesiastical implements or symbols of office ever pertained to the Scandinavian Church, though it is not improbable that they may have been in general use throughout the earlier Christian countries of Europe some centuries before Scandinavia abandoned the creed of Odin. In Ireland, Scotland, and Wales, at any rate, we have abundant evidence of their ancient pre-

[1] The word *Termon* implies church lands, and is also used in the sense of a sanctuary.

valence, and of the great sanctity universally attached to them; and, indeed, in Ireland, from whence the bell of St. Columba, as well as so much else that pertains to the early Christianity of Scotland, appear to have been derived, the small consecrated bell is still comparatively common. In the Museum of the Royal Irish Academy there are eighteen different examples, including several of an exceedingly primitive character. One of the most remarkable, though not the earliest, of these is the inscribed Clog beanuighte, or Blessed Bell, called by Dr. Petrie the Bell of Armagh, which may serve as an example of this singular class of ecclesiastical Celtic relics. Giraldus Cambrensis, in his Welsh Itinerary, refers to the universal veneration with which these portable bells were regarded in Scotland and Ireland, as well as in Wales, remarking that men were more afraid of swearing falsely by them than by the Gospels, because of some hidden and miraculous power with which they were gifted, as well as for fear of the saint to whom they pertained. The following account of this unique relic furnished to me by Mr. Bell of Dungannon affords a singularly lively illustration of the superstitions with which such relics have been regarded even in our own day:—

"The bell of Ballynaback, better known as the *Clog beanuighte*, was preserved in a family named Henning, whose residence is on the low road between Lurgan and Portadown, in the county of Armagh. Unlike other ancient Irish quadrilateral bells it bears on one of its sides an incised inscription, which renders it interesting, since the Church of Rome permitted only a cross or the image of the patron saint to be engraved on such ecclesiastical bells. It would be idle to attempt recounting the miraculous judgments visited on such as profaned or violated the oaths taken on the bell, or the wide-spread desolation which befell such as were anathematized by it; for, early in the twelfth century, as we are told by Meredith Hanmer, William of Winchester, by the authority of Celestine II., in a council held at London, brought in the use of cursing with bell, book, and candle, 'which *liked* the Irish priests well, to terrifie the laytie for their tithes.'

"Paul Henning was the last keeper of the Clog beanuighte; and when any of

his connexions died it was rung by him in front of the *namna gul*, the old women who, according to the Irish fashion, *caoine* and bewail the dead. It was an ancient custom to place the bell near any of the Hennings when dangerously ill. I visited Mrs. Henning, the widow of Paul Henning, on her deathbed. She lay in a large badly lighted apartment crowded with people. The bell, which had remained several days near her head, seemed to be regarded by those who were present with much interest. The vapour of the heated chamber was so condensed on the cold metal of the bell, that occasionally small streams trickled down its sides. This 'heavy sweating' of the bell, as it was termed, was regarded by every one with peculiar horror, and deemed a certain prognostication of the death of the sick woman, who departed this life a few hours after I left the room. The agonized bell, I was told, had on many previous occasions given similar tokens as proofs of its sympathy on the approaching demise of its guardians."

The object of such profound veneration is now safely deposited in the Museum of the Royal Irish Academy at Dublin. The inscription upon it—✠ Oroit ar Chú ma Sca ch m aileuo—has been thus read: *Oroil ar chum ma scahan chun ecumn aileou*,—A prayer for him who shaped my frame to sound Allelujah. Both the rounded form and the inscription on the *Clog beanuighte*, are evidence of its being of a later date than the simpler quadrangular form; and it is unhesitatingly assigned by Dr. Petrie as a work executed towards the close of the ninth century.[1] The same quadrangular form of hand-bell is represented on some of the Irish stone crosses of the ninth and tenth centuries, and is also introduced in a curious group sculptured on the pediment of a remarkable little oratory called the Priest's Church, at Glendalough, which Dr. Petrie ascribes to the middle of the eighth century.[2] The following notice in the Annotations of Tirechan, in the Book of Armagh, is extremely interesting, as shewing the bell among the ecclesiastical gifts bestowed on Fiac, Bishop of Sletty, when St. Patrick conferred on him the episcopal dignity, and may therefore suffice to account for its possession by St. Columba as one of the most essential insignia of the pastoral office:—"Patrick conferred the degree of bishop upon him, so that he was the first bishop that was ordained among the Lagenians; and Patrick gave a box to Fiacc, containing a bell, and a menstir, and a crozier, and a poolire; and he left seven of his people with him."[3]

With such indubitable evidence of the use of the consecrated bell as one of the most essential ecclesiastical implements of the first missionary

[1] Ecclesiastical Architecture of Ireland, 8vo, p. 252.

[2] Ibid., pp. 247, 251.

[3] *Menstir*, a reliquary; *poolire*, a leathern bookcase or satchel. *Vide* Dr. Petrie's illustrations, ibid., pp. 336-342.

bishops, we can be at no loss to account for the origin of the beautiful relic found on the farm of Torrebhlaurn, in the parish of Kilmichael-Glassrie, Argyleshire. The accompanying accurate engraving (*Plate* VI.) renders any minute description unnecessary. It is an ornamental square case or shrine, attached to the bottom of which is a thin plate of brass pierced with a circular hole in the centre. Inside this case, but entirely detached from it, is the rude and greatly corroded iron bell. When first discovered it appeared to have been carefully wrapped in a piece of woollen cloth then almost entirely decayed. The hole in the lower plate is large enough to admit of the insertion of the finger, and was perhaps designed to allow of the bell being touched as a consecrated and miraculously gifted relic, without removing it from its case. Dr. Petrie remarks on the quadrangular form of the Irish portable bells as an evidence of their great antiquity, and refers to the inscribed one in the Dublin Museum as a remarkable example of the transition to the later circular form in the ninth century.[1] A bell of the oblong rounded form rudely fashioned out of a sheet of bronze, found at Marden, in Herefordshire, is engraved in the Archæological Journal.[2] The simplicity of its form and construction abundantly justify its assignment to nearly the same early period.

Perthshire Bell.

At no very remote date several of these ancient consecrated bells were to be found in Scotland, and evidence of the most satisfactory kind proves the former existence of others dedicated to primitive Scottish saints, nor is it at all improbable that some of these may still be preserved. The accompanying engraving represents one example manifestly of the earliest and most primitive form. It was obtained some years ago in Perthshire, and now forms one of the many valuable Scottish relics in the collection of Charles Kirkpatrick Sharpe, Esq.; but unfortunately no clue exists to its original dedication or

[1] Eccles. Architecture of Ireland, 8vo, p. 252. [2] Archæological Journal, vol. v. p. 329.

the local associations of its early history. This primitive bell measures four and a quarter inches in height, including the handle, and three and three-quarters, by one and three-quarters inches, at the mouth. It is fashioned out of a single plate of sheet-iron; and the ring which forms the handle externally projects internally, so as to form a loop, from which the clapper was suspended.

Though no representations of these singular relics of the Celtic church have been introduced on the sculptured crosses, they are figured on various early Scottish seals. The bell of St. Kentigern, the great apostle of Strathclyde, was an object of devout veneration at Glasgow for many centuries; and after forming a prominent feature in the armorial bearings of the archiepiscopal see, still figures in the modern city's arms. There has even been thought to be sufficient evidence to justify the belief of the original bell having escaped the indiscriminate destruction of sacred relics at the Reformation, from an entry in the accounts of the city treasurer for the year 1578, of a charge of two shillings "for ane tong to Sanct Mungowe's bell."[1] But it may be doubted if this could be the original bell of the western saint, which is figured on the ancient seal of the community of the city, used in the reign of Robert I., and also on the contemporary chapter seal, and described by Father Innes as on the burgh seal attached to a charter, now lost, of the year 1293.[2] On the former of these its form is very distinctly shewn, completely corresponding to the earliest square portable bells with looped handles. Its introduction on these seals attests the great reverence with which it was regarded; and various references both in the *Registrum Episcopatus Glasguensis*, and in the *Liber Collegii Nostre Domine, Glasguensis*, MDXLIX, to the *Campana Beati Kentegerni*, abundantly confirm the evidence of its sanctity. It is also repeatedly referred to in the Aberdeen Breviary, as in the anthem appointed for the day of the apostle of Strathclyde:—

Visitat alma pii vite septenta loca Petri
Presul *campana* cui seruit in ethere sacra.

An author of the seventeenth century affirms that the venerable relic survived even in the reign of Charles I.;[3] nor is there anything inconceivable in this, when so many others of the same kind are still preserved. But it is not at all probable that the bell on which the

[1] Burgh Records of Glasgow. Mait. Club, p. 104.

[2] Regist. Epis. Glasgu., Plates II. and V.

[3] Davidis Camerarii de Scotorum, &c., Paris, 1631. Note in Liber Col. Nost. Dom. Glasgu.

citizens of Glasgow, in 1587, expended two shillings in repair was of so unpractical a form as their old burgh seal proves the original *campana* of their patron saint to have been. More probably it was a large bell in the tower of St. Mungo's Cathedral, for the repair of which the specified sum might then prove amply sufficient, as appears from a somewhat earlier entry in the same Burgh Records: "Decimo Maii, 1577, to George Burell, for ane tag to þe towng of þe hie kirk bell, xx$^{d.}$"[1] From the inscription on the present great bell of the cathedral it appears that it was presented by Marcus Knox, a wealthy citizen, in 1594, the old one, after repeated repairs, having at length, it may be presumed, entirely given way. The woodcut represents another of these ancient Celtic relics, which, though preserved along with other memorials of Ireland's saints, in the valuable collection of Mr. Bell of Dungannon, pertains to one of the primitive apostles of his own native land, the celebrated Scottish missionary bishop, St. Ninian or St. Ringan.

The *Clog-rinny*, or bell of St. Ninian, is rude enough to have been contemporary with the Candida Casa of Whithern in Galloway, and to have summoned to the preaching of the missionary bishop the first of the tribes of North Briton converted to the worship of the true God.[2]

The honour attached to the custody of the most sacred relics occasioned in various cases the creation of special offices, with emoluments and lands pertaining to their holders, and the transference of these to lay impropriators on the overthrow of the ancient ecclesiastical system, has led to the preservation of some few of the relics of primitive Scottish saints, even to our own day. But for the rude shock of civil war which, in the last century, involved so many of our oldest nobility in the ruined fortunes of the fated Stuart race, more of these might still have been in existence. Both the "*Sacra Campana*

[1] Burgh Records of Glasgow, p. 100.

[2] Among the valuable ecclesiastical bells in Mr. Bell's collection are those of St. Ringan, St. Ruadan, St. Columba, St. Patrick, and the celebrated *Bearnan brighde*, or gapped bell of St. Brigid, so called from the gap or injury which tradition affirms it to have received when flung by St. Patrick in the midst of the venomous reptiles which he was banishing from the green isle.

Sancti Kessogii," and the "*Sacra Campana Sancti Lolani,*" were included among the feudal investitures of the earldom of Perth—a sufficiently significant proof of the value ascribed to them. They are referred to so recently as the year 1675.[1] Less reverential motives probably led to the preservation of the *Clagan*, or Little Bell of St. Barry, a favourite old Celtic saint who gives name to the district of Argyleshire where he is said to have ministered. This relic, which remained till the close of last century in the possession of the principal heritor of Kilberry parish, was somewhat larger, and probably of less hoar antiquity, than the primitive ecclesiastical memorials previously described. "The bell of St. Barry's Chapel," says the compiler of the Old Account of the Parish of South Knapdale, "is still in preservation at Kilberry Castle, and has been long prostituted to the ignoble purpose of summoning the servants of that family to their meals. It is inscribed with the saint's name in the Latin language and Saxon character, but unfortunately without date."[2] I learn on inquiry, from J. Campbell, Esq., the present proprietor of Kilberry Castle, that the ancient bell of St. Barry no longer exists. In a letter with which he has favoured me, he remarks,—"I have heard my father say that it fell down and cracked. The metal was recast into another bell, which is here now. I have heard him mention the inscription, but do not believe there was any copy of it kept." A remarkable stone cross, with the figure of our Saviour upon it, and numerous sculptured and incised tombstones, still remain around the site of the ancient chapel of St. Barry, the ruins of which were only demolished a few years ago. An inscription upon it bore that it had been plundered and burnt by Captain Pooley, an English rover, in 1513.[3]

More minute information relative to the preservation of another of the ancient Scottish saints' bells, as the evidence of hereditary right to the privileges attached to its custodier, is supplied by "The Airlie Papers," printed in the Spalding Miscellany. One of these is a formal resignation of the Bell of St. Meddan, by Michael Dauid, its hereditary curator, to Sir John Ogilvy; and the transference of it by him to his wife Margaret, Countess of Moray, of date 27th June 1447. It is followed by "the instrument of sessyn of the bell,"

[1] Inquis. at Capit. Dom. Regis Retornatum Perth., NN. 708, 880.

[2] Sinclair's Stat. Acc, vol. xix. p. 318.

[3] MS. Letter from J. Campbell, Esq. of Kilberry Castle.

dated twenty-one days later, from which we discover the substantial advantages pertaining to the custody of this relic. The Countess was thereby put in possession of a house or toft near the church of Luntrethin, which pertained to the bell, of which it formed both the title and evidence of tenure. "The instrument of sessyn" further describes the formal process of investiture, the Countess having been shut into the house by herself, after receiving the feudal symbols of resignation of the property by the delivery to her of earth and stone.[1]

The Aberdeen Breviary commemorates another Scottish bell, pertaining to St. Ternan, the apostle of the Picts, and presented to him by Pope Gregory the Great. It was preserved, with other relics of the saint, at the church which was erected over his tomb at Banchory, Aberdeenshire; and legal deeds of the fifteenth century are extant to shew the importance attached to the custody "of the bell of Sanct Ternan, callit *the Ronecht*,"[2]—a name most probably derived from the Gaelic *Ronnaich*, a poet, *rannach*, a songster, in allusion to its melodious sounds, though such is by no means a usual characteristic of these primitive bells, their *clogarnach* or tinkling being anything but musical. The Old Account of the Parish of Killin, in Perthshire, furnishes the description of the bell of another favourite Celtic saint—that of St. Fillan, who flourished in the middle of the seventh century—not only preserved, but had in reverence for its miraculous powers, almost to the close of the eighteenth century:—

"There is a bell belonging to the chapel of St. Fillan, that was in high reputation among the votaries of that saint in old times. It seems to be of some mixed metal. It is about a foot high, and of an oblong form. It usually lay on a gravestone in the churchyard. When mad people were brought to be dipped in the saint's pool, it was necessary to perform certain ceremonies, in which there was a mixture of Druidism and Popery. After remaining all night in the chapel bound with ropes, the bell was set upon their head with great solemnity. It was the popular opinion that, if stolen, it would extricate itself out of the thief's hands, and return home ringing all the way. For some years past this bell has been locked up to prevent its being used to superstitious purposes."[3]

Pennant visited the locality, and describes the peculiar gifts of healing ascribed to the saint, but he does not appear to have known of his bell. Some portions of the ruined chapel exist, and the pool

[1] Airley Papers, Spalding Miscellany, vol. iv. pp. 117, 118.

[2] Regist. Episc. Aberdon, vol. i. pp. 327, 328; Spalding Miscellany, vol. iv. Pref. p. xxii.

[3] Sinclair's Stat. Acc. vol. xvii. p. 377.

of Strathfillan remains as of yore, still distinguished by the peasantry as the Holy Pool, and even visited by some who have faith in its virtue; but if the bell is to be seen, it must be sought for among the treasures of some private collector. "It was stolen," says the author of the recent Account of Killin Parish, writing in 1843, "by an English antiquarian about forty years ago." Unhappily the old virtues of the bell had departed, or the saint no longer favours a faithless generation, else its potent *clogarnach* should long since have announced its return to Strathfillan.

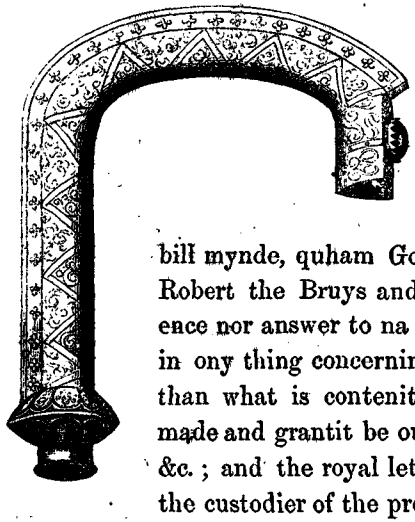
On the Island of Inniskenneth, which is affirmed to derive its name from Kenneth, a friend of St. Columba, whom the prayer of the saint rescued from drowning—probably the St. Kenanach of Irish hagiology—there are the ruins of an ancient chapel of small dimensions, about sixty feet in length, and near to it the remains of a cross, with numerous tombstones both of early and recent date. Here, towards the close of last century, according to the Old Account of the Parish, an ancient bell, most probably that of St. Kenanach, and described by the Statist as "a small bell used at the celebration of mass," was then preserved in the chapel.[1] This example, it is possible, may still be preserved in private hands; and with so many evidences of the recent existence of these relics of the first preachers of the faith in Scotland, it is not unreasonable to conceive that others may also be in safe keeping among the heirlooms of the older Highland families, which a wider diffusion of a just spirit of reverence for our national antiquities may bring to light. Meanwhile, these notices suffice to shew that the beautiful bell found at Torrebhlaurn is by no means unique in Scotland. Probably none of the earlier Christian missionaries were without such a potent relic; and the only Scandinavian influence which history would justify us in connecting with them, is the diminution of their number and the spoiling and slaying of their owners, down to the comparatively late date of St. Olaf's conversion, and his mission to the Pagan Norsemen of the Orkneys, armed with more carnal weapons than the bishop's crosier and consecrated bell. With these venerable memorials of the first preachers of Christianity to the heathen Picts and Scots, may also be mentioned a more modern relic of the same class, a graceful little hand-bell, presented to the Society of Antiquaries of Scotland in 1783, but of which the previous history is unknown. It is decorated, in basso-relievo, on the one side

[1] Sinclair's Stat. Acc., vol. xiv. p. 203.

with the temptation of Adam and Eve, and on the other with the crucifixion. It is no doubt also an old ecclesiastical bell, though belonging to a period long subsequent to the era of St. Kentigern or St. Fillan.

But another and still more interesting relic of St. Fillan, even than his bell, has descended safely to our own day. An English tourist of last century communicated to the Society of Antiquaries the following account of the crosier of St. Fillan, which, with the miracle-working bell of the Saint of Strathfillan, continued then to occupy the ancient scene of his ministration.

"At Killin, July 5, 1782, in the house of Malice Doire, a day-labourer, I was shewn what he called the *Quigrich*. It is the head of a crosier, formerly belonging to St. Fillan, who gave name to a neighbouring Strath. I entreat the Society to excuse the rudeness of the representation annexed, it being the hasty sketch of a traveller, particularly as it is only meant to lead them to the possession of the original. With it is shewn a copy of the king's letters of appropriation and security, which I have carefully transcribed. The neighbours conducted me to the envied possessor of this relic, who exhibited it according to the intent of the royal investment. A youth of nineteen, the representative of his father's name, and presumptive heir to this treasure, lay drooping in an outer apartment, under the last gasp of a consumption."[1]



The royal investment referred to in the letter is granted by James III., in the year 1487, and sets forth that "Forasmekle as we have understand that oure servitour Malice Doire and his forebears has had ane relick of Saint Filane, callit the *Quigrich*, in keping of ws and of oure progenitouris of maist nobill mynde, quham God assolyie, sen the tyme of King Robert the Bruys and of before, and made nane obedience nor answer to na persoun, spirituale nor temporale, in ony thing concerning the said haly relick utherwayis than what is contenit in the auld infeftment tharcof, made and grantit be oure said progenitouris, we charge," &c.; and the royal letters accordingly go on to warrant the custodier of the precious relic to bear it through the country without let or hindrance, as his fathers were wont to do.

[1] Archæol. Scot., vol. iii. p. 289.

The owner of the Quigrich afterwards emigrated to America, carrying the ancient relic with him; and the following extract from a letter which I have recently received from the Rev. Æneas M'Donell Dawson, whose own immediate ancestors were for a time the guardians of St. Fillan's crosier, will shew that it is still in safety, though unfortunately severed from nearly all those national and local associations which confer on it so peculiar an interest:—

"The celebrated crook of St. Fillan is still in Canada, and in the keeping of the very family to whose ancestor it was confided on the Field of Bannockburn, when the king, displeased with the abbot for having abstracted from it the relics of St. Fillan previously to the battle, from want of confidence, it is alleged, in the success of the Scottish cause, deprived him of the guardianship.

"This family, it appears, lost possession of the crosier for a time, having disposed of it for a sum of money to an ancestor of my mother's family, who adhered to the ancient faith. Soon after this transaction, however, ceasing to prosper, and attributing their change of circumstances to their indifference to a sacred object that had been solemnly entrusted to them, they persuaded the purchaser, or rather the person who inherited the crosier from him, to part with it in their favour. I am not aware of the date of their removal to Canada, but I could ascertain it through the kindness of a gentleman resident in the same parish, who went to their house expressly to see the crosier, in order that he might be able to satisfy the friends with whom I was corresponding as to its identity. He learned also that they were in treaty some time ago with a Mr. Bruce of London—possibly the late Lord Elgin (?)—for, I must not say the sale of it, but its restoration to this country. £500 was the sum they named at that time as its ransom."

A subsequent, but equally unsuccessful effort, for the recovery of the Quigrich, was made by a gentleman who possesses estates within the favoured district sanctified of old by the labours of St. Fillan, but equally unfaithful as the bell of Strathfillan, it has failed to return to its ancient locality. The accompanying view is taken from the sketch above referred to, the general accuracy of which is corroborated by the correspondent already quoted. The crosier is of silver-gilt, and weighs about seven or eight pounds. It is hollow at the lower end for the insertion of the staff. On the other extremity, which is flat, a cross is engraved with a star on each side of it, and a large oval crystal is set in the front of the short limb. The simple form of this remarkable relic amply suffices to confirm the great antiquity assigned to it.

The ancient crosier of St. Molocus, another favourite Celtic saint, has in like manner escaped the ravages of time, and the iconoclastic zeal of the reformers of the sixteenth century, and after being pre-

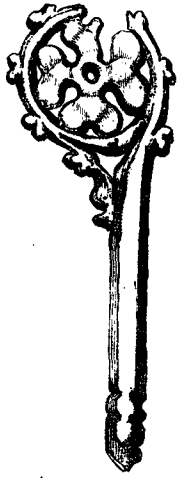
served for centuries in the immediate vicinity of the cathedral of Lismore, has recently come into the possession of the present Duke of Argyle. It is known in the district by the simple name of the *Baculum More*, or big staff; and consists of a plain curved staff, formerly decorated with silver at the top, but long since spoiled of its costlier ornaments. The right of its curatorship, and probably also of bearing it before the bishops of Argyle, appears to have been hereditary, and conferred on its holders the possession of a small freehold estate, which remained in the hands of the lineal descendant of the old staff-bearer till within the last few years. This estate was latterly held under a deed granted by the Earl of Argyle in 1544, the ancient crosier being preserved in verification of the right, till it was recently delivered up, in return for new titles granted, in order to enable the late owner, the last of his race, to dispose of the freehold, which could no longer descend to his heirs. The original charter of confirmation grants,—"Dilecto signiffero nostro Johanni M'Molmore vic Kevir, et heredibus suis masculis de suo corpore legitime procreatis seu procreandis quibus deficientibus at nostram donationem reuerten. omnes et singulas nostras terras de dimidietate terrarum de Peynebachillen et Peynehallen extenden. ad dimidiatem merce terrarum jacen. in Insula de Lismor, cum custodia magni bacculi beati Moloci," &c.[1]

Two other ancient episcopal crosiers remain to be noticed, each of them associated with Scottish sees. The one here engraved was found, in its present imperfect state, along with a glove and other relics, in the course of some excavations in the choir of the cathedral of Fortrose, when a stone coffin was discovered, which doubtless contained the remains of one of the old bishops of Ross. This interesting relic was presented by Sir George Mackenzie to the Society of

[1] The Charter is printed in full in the *Reliquiæ Antiquæ Scoticæ*, No. xxxv. p. 150.

Antiquaries of Scotland in 1822, and is now preserved in their Museum. It retains traces both of colour and gilding, and though greatly decayed and imperfect, is still characterized by considerable elegance. It measures the segment of a circle of about five inches in diameter.

The other crosier referred to belongs to the ancient see of St. Magnus in the Orkneys, and likewise owes its preservation, like the relics of more primitive eras, to the medieval practice of depositing the symbols of the chief pastoral office beside the remains of the deceased bishop.



During the progress of the recent judicious restorations in the choir of the cathedral at Kirkwall, in the month of August 1848, a modern flooring was removed, which concealed the bases of the columns and piers. Several ancient tombs were brought to light by this means, and in one place on the north side of the altar steps, a finely carved slab of stone was exposed. On removing this, a small vaulted chamber or cist was discovered, within which lay a skeleton greatly decayed, and beside it the crosier figured, carved in oak, and a chalice and paten, both roughly modelled, apparently in the common white wax frequently used in ancient seals. The chalice, though somewhat imperfect round the lip, is otherwise entire, but the paten is greatly injured, and both are little more than rude symbols of these most essential sacred vessels used in the service of the mass. The oaken crosier measures eleven and a half inches long as figured here, but it is notched at the lower extremity, evidently for the purpose of attaching it to a staff. The tomb has been supposed to be that of Thomas de Tulloch, circa 1422-1448—a date with which the style of ornament of the crosier very well agrees, but there is no sufficient evidence to enable it to be assigned with certainty to a particular individual. Nearly at the same time as these interesting episcopal memorials were brought to light, a very curious discovery was made of human remains inclosed in one of the pillars of the western or most ancient portion of the choir, at a height of nearly twelve feet from the floor. There was an indentation or cut in the skull, which, with the singular position of the

vault, induced some of the northern antiquaries to hazard the conjecture that they had discovered the remains of their patron saint, the good Earl Magnus: a thing not altogether inconceivable. It was nearly at the same time that the tomb of William, the first resident bishop of the Northern Isles, was exposed, as already described.

The form of the ancient Scottish chalice, as indicated on early tombs, corresponds, as might be expected, to the general usage of the medieval Church. The wax model found in the supposed tomb of Bishop Tulloch at Orkney, indicates the same conformity to the prevailing fashions of the age. The peculiar arts, however, which modified the sepulchral and monumental sculpture, as well as the architecture of the primitive Scottish Church, doubtless also occasionally conferred equally characteristic forms on the sacred vessels and other articles of Church furnishing.

The chalice is figured on various early Scottish ecclesiastical seals, as well as on sepulchral slabs and other medieval sculptures. But an original Scottish chalice, a relic of the venerable abbey of St. Columba, preserved till a very few years since an older example of the sacred vessels of the altar than is indicated in any existing memorial of the medieval Church. The later history of this venerable relic is replete with interest. It was of fine gold, of a very simple form, and ornamented in a style that gave evidence of its belonging to a very early period. It was transferred from the possession of Sir Lauchlan MacLean to the Glengarry family, in the time of Æneas, afterwards created by Charles II. Lord Macdonell and Arross, under the circumstances narrated in the following letter from a cousin of the celebrated Marshal Macdonald, Duke of Tarentum, and communicated to me by a clergyman,[1] who obtained it from the family of the gentleman to whom it was originally addressed:—

"The following anecdote I heard from the late bishop, John Chisholm, and from Mr. John M'Eachan, uncle to the Duke of Tarentum, who died at my house at Irin Moidart, aged upwards of one hundred years:—

"Maclean of Duart expecting an invasion of his lands in Mull, by his powerful neighbour the Earl of Argyll, applied to Glengarry for assistance. Æneas of Glengarry marched at the head of five hundred men to Ardtornish, nearly opposite Duart Castle, and crossing with a few of his officers to arrange the passage of the men across the Sound of Mull, Maclean, rejoicing at the arrival of such a friend, offered some choice wine in a golden chalice, part of the plunder of Iona. Glengarry was struck with horror, and said, folding his handkerchief about the chalice,

[1] Rev. Æneas M'Donell Dawson.

'Maclean, I came here to defend you against mortal enemies, but since by sacrilege and profanation you have made God your enemy, no human means can serve you.' Glengarry returned to his men, and Maclean sent the chalice and some other pieces of plate belonging to the service of the altar, with a deputation of his friends, to persuade him to join him; but he marched home. His example was followed by several other chiefs, and poor Maclean was left to compete single-handed with his powerful enemy."

Such was the last historical incident connected with the golden chalice of Iona, perhaps without exception the most interesting ecclesiastical relic which Scotland possessed. Unfortunately its later history only finds a parallel in that of the celebrated Danish golden horns. It was preserved in the charter-chest of Glengarry, until it was presented by the late Chief to Bishop Ronald M'Donald, on whose demise it came into the possession of his successor, Dr. Scott, Bishop of Glasgow. Only five years since the sacristy of St. Mary's Roman Catholic Church in that city, where it was preserved, was broken into, and before the police could obtain a clue to the depredators, the golden relic of Iona was no longer a chalice. Thus perished by the hands of a common felon a memorial of the spot consecrated by the labours of some of the earliest Christian missionaries to the Pagan Caledonians, and which had probably survived the vicissitudes of upwards of ten centuries. In reply to inquiries made as to the existence of any drawing of the chalice, or even the possibility of a trustworthy sketch being executed from memory, a gentleman in Glasgow writes: —"I have no means of getting even a sketch from which to make a drawing. Were I a good hand myself I could easily furnish one, having often examined it. It was a chalice that no one could look on without being convinced of its very great antiquity. The workmanship was rude, the ornamental drawings or engravings even more hard than medieval ones in their outlines, and the cup bore mark of the original hammering which had beaten it into shape."

The oldest existing Scottish relic of this class is the "Dunvegan Cup," celebrated by Sir Walter Scott in his "Lord of the Isles," and still sacredly guarded in the Castle of Dunvegan, in Skye, along with other Celtic heirlooms of the chiefs of MacLeod. "The Horn of Rorie More," says Scott, "preserved in the family, and recorded by Dr. Johnson, is not to be compared with this piece of antiquity, which is one of the greatest curiosities in Scotland." Its dimensions are nine inches and three quarters in inside depth, ten and a half in height on the outside, the extreme measure over the lips being four

inches and a half. The engraving on *Plate* VI. is from a private plate in the possession of C. K. Sharpe, Esq., executed from a drawing by Mrs. MacLeod. Another, but much less accurate or minute view of this curious relic is given in the Archæologia, from a sketch by Mr. Daniell.[1] These will serve better than any elaborate description to convey a correct idea of its peculiar form. The material of the cup is wood, to all appearance oak, most curiously wrought and embossed with silver work. A series of projecting bosses appear to have been jewelled, and two or three of them still retain their simple settings. The ledge, the projecting brim, and the four legs which support the cup, are of silver, which with the other silver mountings appear to have been gilt. Around the exterior is an inscription in Gothic characters, which Sir Walter Scott deciphered nearly as follows:[2]—

Ufo : Johis : Mich : Mgn : Princípis : De :
Hi : Manæ : Vich : Liahia : Mgrgneil :
Et : Spat : Do : Jhu : Da : Clea : Ill : Dea : Ipa :
Fecit : Ano : Dí : Ix : 93° Onili : Oimi :

It may be thus extended:—*Ufo Johannis Mich Magni Principis de Hi Manæ Vich Liahia Magryneil et sperat Domino Jhesu dari clementiam illi deæ ipsa. Fecit Anno Domini 993 Onili Oimi.* The inscription is a curious specimen of early Celtic Latinity:—Ufo, the son of John, the son of Magnus, Prince of the Isle of Man, the grandson of Liahia Macgryneil, trusts in the Lord Jesus that mercy will be given to him in that day. Oneil Oimi made this in the year of God nine hundred and ninety-three. Within the mouth of the cup, on each of the four sides, is the sacred monogram, I.H.S., which, coupled with the tenour of the inscription, leaves little room to doubt, notwithstanding its unusual form, that it had been originally designed for a chalice, and gifted by Ufo for the service of the altar. The

[1] Archæologia, vol. xxii. Plate XXXIII.

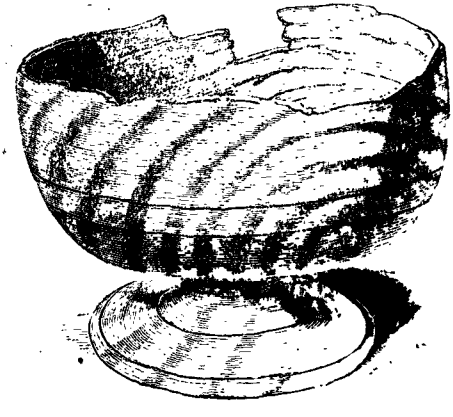
[2] I have ventured on two slight alterations of Sir Walter Scott's reading of the original inscription, which seem indispensable for making sense of it. What he calls "the puzzling letters *Hr*," there can be little doubt is the Celtic *Hi*, or island. The concluding words of the first part, which Sir Walter renders *illdra . ipa*, and then extends to *illorum opera*, somewhat to the confusion both of derivation and grammar, become by the simple substitution of an *e* for an *r*—letters nearly similar in the old Gothic character—*ill . dea . ipa*, fully admitting of the rendering above suggested. Not having seen the cup myself, I must leave the date for determination by some future observer; but from the character of the lettering it is probable that it will prove at least a century later, the *ix.* being more likely an *m*, which would assign it to the memorable year in which Malcolm, Margaret, and Edgar died. *Vide* note E., Lord of the Isles.

family legends of the Macleods associate it with some old traditional chief or hero, Neil Ghlune-dhu, or Black-knee, but it seems to have been a family heirloom from time immemorial.

The use of wooden vessels as chalices was, for obvious reasons, abandoned at an early period, so that the *calices lignei* became in later ages a proverbial illustration of the obsolete simplicity of primitive ages. "We may now take up that old regrait," exclaims Fountainhall, in moralizing on the immense wealth first acquired by the Church, about A.D. 600, "when ther ware *calices lignei* ther ware then *sacerdotes aurei*, but now when our chalices are of gold and silver, we have got *ligneos sacerdotes*."[1] Vessels of wood, even though mounted and jewelled, like the Dunvegan chalice, were very early disused in the services of the altar; and the mazer cup or maple bowl constituted one of the most prominent implements in the conviviality of the Middle Ages. The name indeed ceased at an early period to be exclusively reserved for those manufactured from the wood of the maple tree, from whence the mazer had derived its name, and was at length applied to all drinking cups of a certain class, of whatever material. Among the beautiful examples of medieval art recently exhibited at the London Royal Society of Arts, was a beautiful mazer bowl of silver-gilt, of fifteenth century workmanship, which belongs to Oriel College, Oxford. Of the same class also, probably, were some of the Scottish cups enumerated in a curious inventory of the treasure and jewels of James III., "fundin in a bandit kist like a gardeviant," among which are the "FOURE MASARIS, CALLIT KING ROBERT THE BROCIS, with a cover," and again, "the hede of silver of ane of the coveris of masar." The same "Collection of Inventorys of Royal Wardrobe and Jewell-house," from 1488 to 1606, furnishes some interesting minutiæ in regard to the royal plate and jewels, and the consecrated vessels for the service of the altar. Besides the mazers, there is "ane cowp callit king Robert the Bruce coupe, of silver owirgilt,"—another pleasing evidence of the reverence with which the name of the saviour of his country continued to be regarded. The royal plate and jewels are of an exceedingly curious and costly character, while among the "chapell geir" we find "ane chesabill of purpour velvot, with the stoyle and fannowne, orphis, twa abbis," &c. Another of "crammosie velvot, furniset with a stole and a fannoun only;" another "of black velvot, with croce upoune it, broderrit

[1] Fountainhall's Historical Notices, Bann. Club, vol. ii. p. 498.

of clayth of gold." Altar cloths, broidered and jewelled; "ane chalcis and ane patene gilt;" "ane caise of silver for the messbreid, with ane cover;" "ane litil cors with precious stanis;" "ane lytill box of gold with the haly croce, send be the Duk of Albany to the kingis graice;" "ane croce of silver, with our Lady and Sanct Johne, gilt." Of silver, "ouregilt," in Edinburgh Castle, "twa chandleris, ane chalice and ane patine, ane halie watter fatt," &c.; "ane bell of silver;" "ane bassing; ane laver of fyne massy gold, with thrissillis and lelleis crounit upoun the samen," &c. The list indeed, of which these are only a few illustrations, greatly exceeds what might have been anticipated at a period succeeding many years of national disaster and suffering. It is to be regretted that scarcely a solitary example of the medieval Scottish "*chapell geir*," or of the royal mazer, or convivial bowl, remains to illustrate the usages of our ancestors. We learn, however, from these old inventories, that there was no lack of either, and also that the value attached to the mazer cup dates in Scotland, as elsewhere, from a very early period. This probably originated in part from superstitious feelings, arising from some special virtue attached to the wood of the maple tree. But its close grain, the beauty of its variegated surface, and its susceptibility of high polish, were doubtless the chief reasons for its continued use as the material for the pledge-cup and wassail bowl; and when it was replaced by other woods, or even by the precious metals, the old name was still retained. The woodcut represents a mazer of very simple form, and probably of an early age, made not of the maple but the ash, a tree famed of old for many supernatural qualities. It was found in the deep draw-well, in the ruined castle of Merdon, near Hursly, built by Bishop Henry de Blois, A.D. 1138.[1] The *ciphus de mazero* frequently figures among the household effects of citizens of the fourteenth and fifteenth centuries, and is no less commonly alluded to by the elder poets, as in Robert de



[1] Archæol. Journ., vol. iii. p. 361.

Brunne's version of Wace's *Brut*, written in the latter part of the thirteenth century, where "mazers of rich price" are specified among the gifts bestowed by king Arthur on his foreign guests. The mazer figures also in the inventory of goods of the Sheriff of Nottingham, taken by "Lytell John," as printed by Wynken de Worde, in the popular black-letter ballad,—"A Lytell geste of Robyn Hode;" and it is thus introduced in the fine old Scottish ballad of "Gill Morice,"

"Then up an' spak the bauld baron,
An angry man was he;
He's ta'en the table wi' his foot,
Sae has he wi' his knee,
Till siller cup an' mazer dish
In flinders he garr'd flee."

The mazer cup was evidently regarded as a family heirloom, and as such inscribed with quaint legends and pious aphorisms, and sometimes decorated with rich chasing and carving, as Chaucer has so beautifully described in the "Mazer yrought of the maple," mentioned in his Shepherd's Callender. The quaint simplicity, both of the devices and inscriptions of many of the wassail bowls, furnishes curious illustration of the manners and ideas of the age to which they belong. Our forefathers had a pious, but withal a very convenient fashion, of uniting religion with their daily sports, and even, as it

Mazer of the Fourteenth Century.

might seem, seeking to sanctify their excesses. Both Chaucer and Dunbar wind up their freest versions of the Decameron with a pious couplet, and in like spirit the old toper invoked the Trinity on the rim of his wassail bowl, and engraved the mystic saint Christopher within it. The woodcut represents a very beautiful mazer of the time of Richard II., now in the possession of Evelyn Philip Shirley, Esq., M.P. It is made of highly polished wood, apparently maple,

and hooped with a richly embossed rim of silver gilt, on which is inscribed, as shewn in the annexed fac-simile of a portion of the "edgle of sylver," the following characteristic invocation:—

In . the . name . of . the . trinitie
fille . the . kup . and . drinke . to . me.

From the tenor of such legends frequently inscribed on these ancient cups, it has not been uncommon to describe them as sacred vessels, designed only for use in the service of the Church. Thus a maple cup, bearing the date 1608, was forwarded for exhibition at a meeting of the British Archæological Association in 1848, as a chalice;[1] and another, apparently of the same character, made in the year 1611, was shewn to the members of the Archæological Institute in 1850, which it was also conjectured "might have served in some rural parish as a chalice."[2] Such cups, however, were by no means rare in the beginning of the seventeenth century, and though frequently inscribed in terms calculated to suggest such a sacred character, there will generally be found some accompaniment in the legend or devices no less characteristic of mirth and good fellowship. On the 4th January 1667, Mr. Pepys notes in his gossiping Diary, having "last of all, a flagon of ale and apples, drunk out of a wood cup, as a Christmas draught, which made all merry." Fountainhall in his "Decisions," records some curious notes of an action brought by Sir Alexander Ogilvie, afterwards Lord Forglen, in 1685, against Sir Alexander Forbes of Tolquhoun, for stealing a gilded mazer cup out of his house, which was afterwards accidentally discovered in the hands of a goldsmith in Aberdeen, with whom its careless owner had left it some years before for repair. From such glimpses as we recover of the history of the litigants, neither of the old Scottish baronets seem characters likely to have gifted chalices, even of maple or ashen wood, though probably well fitted to match with Secretary Pepys in discussing a "Christmas draught." One quaint, but very beautiful allusion, however, is made by an old Scottish writer to the mazer cup, referring to it metaphorically, as to a sacramental chalice. The passage occurs

[1] Journal of the Archæological Association, vol. iv. p. 403.

[2] Archæological Journal, vol. vii. p. 81. *Vide* also vol. vi. p. 189.

in Zacharie Boyd's "Last Battell of the Soule," published at Edinburgh in 1629. "Take now," says he, "the cup of salvation, the great *Mazer* of His mercy, and call upon the name of the Lord."

A curious wooden cup, in the collection of W. B. Johnstone, Esq., bearing the date 1611, serves to illustrate the character of the pious legends graven on the mazers of the seventeenth century,—not unsuited in part for the decoration of a sacramental chalice, but also accompanied with other devices and allusions, which leave no doubt of the real destination of the mazer for the convivial board. Its height is nine inches, and its greatest circumference, a little below the brim, nineteen inches. The outer surface of the bowl is divided into ornamental compartments, within which are grouped the lion, unicorn, stag, ostrich, hedgehog, dog, and cock, with trees, flowers, &c. The ostrich is represented regaling himself with a horse-shoe![1] Around the rim, bowl, stem, and even on the lower side of the stand, the carver has indulged his moralizing vein, both in prose and verse. The inscription on the bowl reads,—

THE FOUNTAYNE OF ALL HEALTH AND WEALTH AND JOYES,
TO THIRSTY SOULES HE GIVETH DRINK INDEED;
SUCH AS TURN TO HIM FROM THEIR EVILL WAYES
SHALL FINDE SOUND COMFORT IN THEIR GREATEST NEEDE;
BUT EVILL WORKERS THAT IN SINNE REMAINE,
THEY ARE ORDAYNED TO ETERNALL PAYNE.
FOR EVERY ONE OF US SHALL BE REWARDED ACCORDING TO
OUR WORKES; THEREFORE REPENT UNFAYNEDLY AND AMEND.

Round the rim of the stand are the words and date:—THEY THAT SEEKE AFTER THE LORD SHALL PRAYSE HIM, THEIR HARTS SHALL LIVE FOR EVER. 1611.; and then on the underside of the stand the cup thus takes up the hortatory strain, in a mixed vein, in *propria persona*:—

MISSUSE ME NOT ALTHOUGH I AM NO PLATE;
A MAPLE CUPP THAT IS NOT OUT OF DATE.
DRINKE WELL, AND WELCOME, BUT BE NOT TOO FREE,
EXAMINE WHETHER THAT IN CHRIST YOU BE;
IF THAT YOUR FAITH BE TRUE, AND FIRM, AND SOUND,
THEN IN ALL GOOD WORKS YOU WILL STILL ABOUND.
SO RUN THAT YE MAY OBTAYNE.

There was perhaps a little quiet humour lurking in the mind of the carver when he inscribed these latter excellent and very practical

[1] This quaint version of an old popular error forms the crest of more than one Scottish family, but there is no indication of its being introduced on the mazer as a heraldic device, or symbolic reference to its original owner.

maxims on the underside of the stand, where it is only possible to peruse them when the cup is empty! It will be seen that this maple cup bears a very close resemblance to the contemporary vessels of the same class referred to in the Journals of the Archæological Association and of the Institute. Their odd devices and quaint inscriptions are not unworthy of note by the historian as indicative of the old Puritan spirit manifesting itself in this simple guise during the reign of James, preparatory to its stern outbreak in that of his son.

These spurious chalices of modern date have led us somewhat beyond the legitimate bounds of the subject, though they cannot be considered quite undeserving of a passing notice. Only one other early Scottish relic remains to be noted,—a small brass box, closely resembling several which have been found at various times in England, and have been supposed to be pyxes, intended to hold the chrism, or by some as designed only for containing pigments or unguents. Two similar boxes discovered at Lewis are engraved in the Archæologia, and described as small bronze pyxes;[1] and another found at Lincoln is figured in the Archæological Journal.[2] The remarkably close resemblance of these to the Scottish example manifestly points to some common purpose for the whole; and the latter is of special value as supplying the means which are wanting in the others of making some approximation to the precise age to which they belong. It was found about the year 1818, near Dalquharran Castle, in the parish of Daily, Ayrshire, filled with coins of David II. of Scotland, Edwards I. and II. of England, and two counterfeit sterlings of the Counts of Flanders and Porcieu. It is now in the Museum of the Scottish Antiquaries.

Few as are the examples of Scottish ecclesiastical relics which we can now refer to, they are more than we might reasonably anticipate in a country where the fanes and altars of the medieval church have lain in ruins for so many centuries, and even the existence of a single ruined church pertaining to its primitive Christian era may be still liable to dispute. Though such remains are of less esteem as sources of information relative to the periods to which they belong than the objects of earlier eras, they will not be regarded by the intelligent historian as altogether devoid of value in relation to the peculiar arts and customs or the degree of civilisation of ages, concerning which much obscurity has still to be removed.

[1] Archæologia, vol. xxxi. p. 437. [2] Archæological Journal, vol. vi. p. 71.

CHAPTER IX.

MISCELLANEOUS ANTIQUITIES.

THE numerous relics which illustrate the arts and manners of the Medieval Period have already furnished English and foreign antiquaries with copious materials for large and valuable treatises on single selected departments, nor is the field of Scottish medieval art greatly less productive. It is not, however, designed in this closing chapter to do more than select a few characteristic examples of a very miscellaneous character, which are worthy of a passing glance in a treatise on Scottish Archæology, though they pertain to a branch of the subject which can only be satisfactorily dealt with in detached monographs. Of medieval personal ornaments it would be vain to attempt the most cursory enumeration in a closing chapter; but their value as elements of medieval history is altogether different from those of the primitive periods heretofore referred to. Whatever exhibits to us the artistic skill, the ingenuity, and the personal habits of a past age, cannot be without interest to the historian; but we manifestly stand in a very different position in relation to those accessories of history when dealing with comparatively recent and literate ages.

Gold Ring, Flodden Field.

One branch of medieval art—the fictile ware—naturally possesses peculiar attraction to the Archæologist, as the offspring of the primitive arts already minutely considered. So far as may be judged of Scottish medieval pottery from the few examples preserved, it does not greatly differ from contemporary English fictile ware. One curious

specimen found in 1833 at Perclewan, in the parish of Dalrymple, Ayrshire, is described as "a pitcher of earthenware like that represented in prints in the hand of the woman of Samaria, at the well of Sychar."[1] It is glazed, as is most usual with medieval pottery, of a greenish colour, and is curiously decorated on the front with the face and hands of a man in relief. From the description it appears to bear a close resemblance to a fictile vessel found at the bottom of an old well, discovered under the foundation of houses in Cateaton Street, City, London, taken down in 1841.[2]

Several fine specimens of medieval pottery were dug up a few years since on the estate of Courthill, in the vicinity of Dalry, Ayrshire, and are now in the possession of the proprietor, Andrew Crawford, Esq. Nearly at the same time a remarkable antique sword was discovered at Courthill. The blade, which was of iron, was so greatly corroded that only a fragment of it could be removed; but the handle is of bronze, in the form of a dragon, and is described as characterized by considerable elegance.

Fragments of pottery, of a similar character to the most abundant class of early English medieval pottery, were dug up at a considerable depth, during the progress of excavations on the Castlehill of Edinburgh in 1849, for constructing a large reservoir, but they were unfortunately too much broken by the workmen to admit of any very definite idea being formed of their shape. The annexed woodcut is from an example in my own possession, which was dug up a few years since in the ancient tumular cemetery in the neighbourhood of North-Berwick Abbey, East-Lothian. It measures eleven and a quarter inches in height, and about five and a half inches in greatest diameter, and is covered, both externally and internally, with the usual greenish glaze, common on contemporary English pottery. Various similar specimens appear to have been discovered in the same locality, but in most cases only to be destroyed,—such coarse earthenware being

[1] New Statist. Account, vol. v. p. 279. [2] Journ. Archæol. Assoc., vol. iii. p. 63.

naturally regarded as scarcely worth the trouble of removing. The example figured here represents a small but very curious specimen of Scottish fictile ware, in the collection at Penicuick House, of the precise age of which we have tolerably accurate evidence. It was found on one of the neighbouring farms in the year 1792, filled with coins of Alexander III., and of Edward I. and II. of England. It measures only three and three quarters inches in height; and is perforated at nearly uniform intervals with holes, as shewn in the engraving. It is of rude unglazed earthenware, and is unsymmetrical, as represented here.

Another class of relics found in considerable numbers at North-Berwick, as well as in various other districts, are small tobacco pipes, popularly known in Scotland by the names of *Celtic* or *Elfin pipes*, and in Ireland, where they are even more abundant, as *Dane's pipes*. The woodcut represents one of those found at North-Berwick, the size of the original. To what period these curious relics belong, I am at a loss to determine. The popular names attached to them manifestly point to an era long prior to that of Sir Walter Raleigh and the Maiden Queen, or of the royal author of "A Counterblast to Tobacco," and the objects along with which they have been discovered, would also seem occasionally to lead to similar conclusions, in which case we shall be forced to assume that the American weed was only introduced as a superior substitute for older narcotics. Hemp may in all probability have formed one of these. It is still largely used in the East for this purpose; but Mr. C. K. Sharpe informs me that even in his younger days it was common for the old wives of Annandale to smoke a dried white moss gathered on the neighbouring moors, which they declared to be much *sweeter* than tobacco, and to have been in use before the American weed was heard of. I leave the subject, however, for further investigation, only adding one or two examples of the circumstances under which these Elfin pipes have been found.

The ancient cemetery at North-Berwick is in the vicinity of a small Romanesque building of the twelfth century, and close upon the sea shore. Within the last fifty years the sea has made great encroachments, carrying off a considerable ruin, and exposing the skeletons of the old tenants of the cemetery, along with many interesting relics of former generations, at almost every spring tide. Notices of similar discoveries of the Elfin pipe occur in several of the Scottish Statistical Accounts under various circumstances, but some of them certainly suggestive of their belonging to a remote era: *e.g.*—

"Many of the ancient British encampments appear in the parish [of Kirkmichael, Dumfriesshire.] Upon some of these being opened ashes have been found, likewise several broken querns or hand-mills, and in one of them, upon the farm of Gilrig, with a partition crossing it, and which seems to have been occupied during later times, there was dug out a sword having a basket-hilt, but so much covered with rust that it was impossible to form any accurate opinion respecting its antiquity. There was also seen a number of pipes of burnt clay, with heads somewhat smaller than that of the tobacco-pipe now in use, swelled at the middle and straiter at the top."[1] Again,

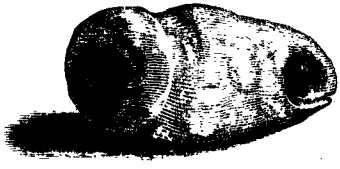
"Till lately, one of those remarkable monuments of antiquity, called standing stones, stood at Cairney Mount, (parish of Carluke, Lanarkshire,) but the hope of finding a hidden treasure induced some rude hand to destroy it. It is supposed to have stood at the side of a Roman road passing from Lanark across the bridge of the Mouse beneath Cartland Crags. . . . A celt or stone hatchet; Elfin-bolts, (flint and bone arrow-heads); Elfin pipes, (pipes with remarkably small bowls); numerous coins of the Edwards, and of later date, have been found in the neighbourhood."[2] An example is also noted of the discovery of a tobacco pipe in sinking a pit for coal at Misk, in Ayrshire, after digging through many feet of sand.[3]

Some of the Scottish and Irish Elfin pipes are even smaller than the example figured above, and seem still better adapted for the recreations of "the good people" to whom their origin is popularly ascribed. Others are ornamented with patterns in relief, and many of them, though not generally of the very smallest size, are stamped with figures or devices. One example in the possession of Mr. C. K. Sharpe, found at a depth of many feet on the Castlehill of Edinburgh, bears the impress of the initials $\frac{T}{L}\frac{B}{}$; and of upwards of seventy specimens in the collection of Mr. Bell of Dungannon, some are stamped R D, and on others are the letters G A, C L, $_{O}^{O}H_{O}$, and I P.

The annexed woodcut represents a still more curious relic, apparently pertaining to the same class of objects, though greatly more

[1] New Stat. Account, vol. iv. p. 71. [2] Ibid. vol. vi. p. 581. [3] Ibid. vol. v. p. 430.

primitive in form and construction. It appears to be a tobacco pipe fashioned in red sandstone in the form of an animal's head, and with the perforation for inserting the straw or reed by which it must have been completed, made obliquely through one of the eyes. It was found in digging a drain at the village of Morningside, at the base of the Pentland Hills, where numerous traces of primitive population have been brought to light, and was presented to me by Dr. David Skae, Physician of the Royal Asylum there. It is figured here about two-thirds the size of the original.

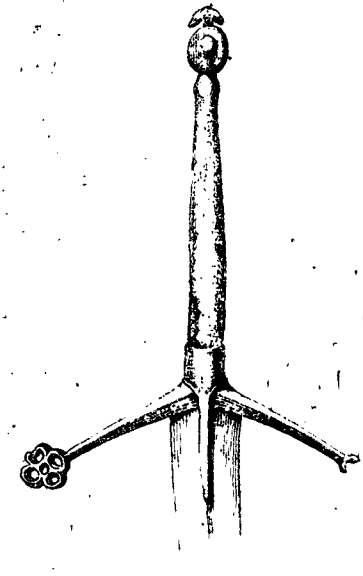


In the Museum of the Scottish Antiquaries there is a curious collection of Irish "Danes' pipes," precisely similar in form to those found in Scotland. A variety of examples of the same kind, found both in England and Ireland, are also figured in the Dublin Penny Magazine,[1] along with certain "clay pipe-stoppers, evidently appendages to pipes with small bowls," but which those who can still remember the obsolete fashions of the past generation have no difficulty in recognising as the periwig curlers of much more recent times than the Danes, if not the Elves! The conclusion arrived at by the writer in the Dublin Penny Magazine is, that these Danes' pipes are neither more nor less than tobacco pipes, the smallest of them pertaining to the earlier years of Queen Elizabeth's reign, when the rarity and value of tobacco rendered the most diminutive bowl sufficiently ample for the enjoyment of so costly a luxury. From this he traces them down to the reign of Charles II., by the increasing dimensions of the bowl. It is not improbable that these conclusions may be correct, notwithstanding the apparent indications of a much earlier origin, which circumstances attendant on their occasional discovery have seemed to suggest. The following description of a curious Scottish memorial of the luxury would, however, seem at least to prove that we must trace the introduction of tobacco into this country to a date much nearer the discovery of the New World by Columbus than the era of Raleigh's colonization of Virginia. The grim old Keep of Cawdor Castle, associated in defiance of chronology with King Duncan and Macbeth, is augmented, like the majority of such Scottish

[1] Dublin Penny Magazine, vol. iii. p. 29.

fortalices, by additions of the sixteenth century. 'In one of the apartments of this later erection, is a stone chimney, richly carved with armorial bearings and the grotesque devices common on works of the period. Among these are a mermaid playing the harp, a monkey blowing a horn, a cat playing a fiddle, and a fox smoking a tobacco pipe. There can be no mistake as to the meaning of the last lively representation, and on the same stone is the date 1510—the year in which the wing of the castle is ascertained to have been built.[1]

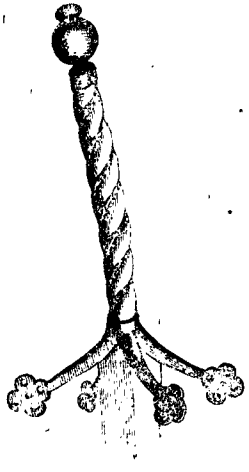
The arms and armour are no less characteristic of the medieval than of earlier periods, and are not without minuter national details well worthy of note. There was indeed from the very commencement of the Scottish medieval period in the eleventh century, to the final disarming of the Highland clans in 1746, two completely diverse modes of warfare and military accoutrement prevailing in Scotland. The old Celtic population, occupying for the most part the Highland fastnesses, retained many of the usages of their forefathers under partially modified forms, and even in the decoration of their weapons and defensive armour preserved the ancient style, which is still traceable on the Pictish monuments of Scotland. Many of the circular Highland targets of the seventeenth and eighteenth centuries present exactly the same interlaced knotwork as may be seen on bosses and limbs of early crosses, and even on relics belonging to the last Pagan era. A mere glance, however, at a few characteristic examples must suffice here; and among these none is more noticeable than the old claymore with reversed guard, which is sculptured on so many of the ancient tombstones of Iona and of the Western Isles. In the portrait of James I. of Scotland, which accompanies the old folio edition of the Scots Acts, the king bears a weapon of this description. It occurs, however, on



Ancient Claymore

[1] Carruthers' Highland Note-Book, p. 154.

tombs of a much earlier period, and is now very rarely to be met with. One good small example is in the Museum of the Scottish Antiquaries, and another larger and very fine specimen, the handle of which is here engraved, is in the valuable collection of W. B. Johnstone, Esq. The claymore is figured in the sculptures both of Iona and Oronsay with a considerable variety of details. In some the blade is highly ornamented, and the handle varies in form, but all present the same characteristic, having the guards bent back towards the blade. A curious variety of this peculiar form is seen in a fine large two-handed sword preserved at Hawthornden, the celebrated castle of the Drummonds, where the Scottish poet entertained Ben Jonson during his visit to Scotland in 1619. It is traditionally affirmed to have been the weapon of Robert the Bruce, though little importance can be attached to a reputation which it shares with one-half the large two-handed swords still preserved. The handle appears to be made from the tusk of the narwhal, and it has four reverse-guards, as shewn in the cut. The object aimed at by this form of guard doubtless was to prevent the antagonist's sword from glancing off, and inflicting a wound ere he recovered his weapon, and in the last example especially it seems peculiarly well adapted for the purpose. Among the curious collection of ancient weapons in the Museum of the Scottish Antiquaries, is a sword the blade of which measures thirty-two and a half inches long, and has a waved edge, returned a short way over the back. It was discovered among the ruins of Bog-Hall Castle, near Biggar, Lanarkshire; while the handle, which is made of the section of a deer's horn, and is still more remarkable than the blade, was found at a great depth in a morass, on the property of Sir Thomas G. Carmichael, Bart., in Tweeddale.



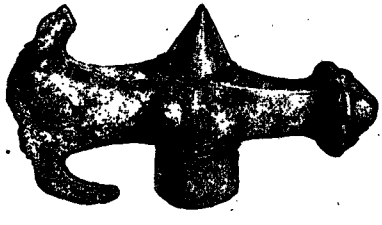
Hawthornden Sword.

The later two-handed sword, though still so familiar to us, is perhaps the most interesting in an archæological point of view, of all the military relics pertaining to the Medieval Period. The huge, ponderous, and unwieldy weapon, seems the fittest emblem that could be devised, of the rude baron of the thirteenth century, who lived by

"the good old rule" of physical force, and whose hardy virtues—not unsuited to an illiterate age—are strangely mistaken for the evidences of a chivalry such as later ages have not seen. Calmly reasoning from this characteristic heirloom, as we have done from those of remoter and less known periods, we discern in it the evidence of just such hardy, skilless, overbearing power, as history informs us was the character of the medieval baron, before the rise of the burgher class readjusted the social balance by the preponderance of rival interests. The weapon figured here is a remarkably fine and unusually large specimen of the old Scottish two-handed sword, now in the possession of George Seton, Esq., representative of the Setons of Cariston. It measures forty-nine inches in the blade, five feet nine inches in entire length, and weighs seven and a half pounds. But the chief interest of this old relic arises from the well-authenticated family traditions which associate it with the memory of its first knightly owner, Sir Christopher Seton of that Ilk, from whom some of the oldest scions of the Scottish Peerage have been proud to trace their descent. He was married to Christian, sister of King Robert the Bruce, whom he bravely defended at the battle of Methven. He was shortly after taken prisoner by Edward I., and basely hanged as a traitor. "So dear to King Robert was the memory of this faithful friend and fellow-warrior, that he afterwards erected on the spot where he was

executed a little chapel, where mass was said for his soul."[1] Besides this fine example of a Scottish two-handed sword, may be mentioned that ascribed to Sir William Wallace, preserved at Dumbarton Castle; that of Sir John Graham of Dundaff, (slain 1298,) in the possession of the Duke of Montrose; another "Wallace sword" at Kinfauns Castle; and other specimens at Talyskir, in the Isle of Rasay; at Abbotsford; and in the Museum of the Scottish Antiquaries.

Among the most recent additions to the same collection is another remarkable weapon, which possesses undoubted historical value, and may be associated with more confidence with the great victory of Robert the Bruce than most of the relics that bear his name. It consists of the head of a battle-axe, of iron, coated with bronze, which is figured here. It was discovered in draining the morass at Bannockburn in 1785, and is considerably broken on the edge, evidently from its use upon the mailed panoply of the gallant knights who fought in that hard-stricken field. It measures eight and a quarter inches in length, and four and three quarters in height, from the point to the insertion of the haft.

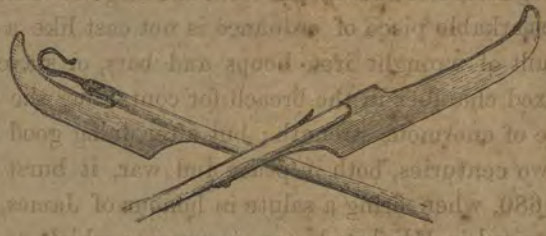


Battle Axe, Bannockburn.

Numerous other remarkable specimens of ancient Scottish arms and armour are preserved both in the Museum of the Scottish Antiquaries and in other public and private collections; but a mere reference to these without copious illustrations could be of little avail to the antiquary. The Scottish Museum includes a variety of specimens of the old quarrel-head, or Wallace Bolt, as it is generally termed; ancient swords, lance and spear heads, cross-bows, daggers, dirks, hunting knives, and the old Highland Lochaber-axe, with the more modern fire-arms, and other military accoutrements, including the singularly complicated purse-clasp, described by Sir Walter Scott as that of the celebrated outlaw Rob Roy, with four pistols ingeniously

[1] Tytler, third edition, vol. i. p. 229; Robertson's Index, pp. 135-138. The outer wood-casing of the handle is modern, and incorrectly made in imitation of a small single-handed sword. That of the old two-handed sword was invariably nearly straight, so as to admit of the hand moving freely along it. The two-handed claymore figured on p. 682 is probably one of the very earliest examples of the transition to the later unwieldy weapon. The handle measures fourteen inches, and the blade three feet three and a half inches, in length.

concealed in it for defence of the contents of the purse. Still more recent relics preserve associations with the victors of Prestonpans and the vanquished of Culloden Moor. But such objects belong perhaps fully more to the poet than to the archæologist, and are too frequently employed to add a fictitious interest to collections, the real use and value of which have yet to be appreciated.



Lochaber Axes.

Some remarkable pieces of ancient artillery also figure in Scottish history, one or two of which have escaped the perils of siege and the waste of time, though the most of them live only in the quaint records of Scottish chroniclers, like the famed Seven Sisters, cast by Robert Borthwick, the master-gunner of James IV., which did their last Scottish service on Flodden Field. A better fate has attended the still more celebrated Mons Meg, whose unwieldy proportions probably proved her safety, by inducing the impetuous king to leave her behind, when he carried the flower of Scottish chivalry to that fatal field. The ancient barrier gateway of Edinburgh Castle, built most probably soon after the siege of 1572, was surmounted with a curious piece of sculpture, occupying a long narrow panel, which is chiefly filled with representations of artillery and munitions of war, and among these Mons Meg plays a prominent part. The old-fashioned narrow wheel carriages of the sixteenth century having given place to more sub-

Sculpture, Edinburgh Castle. Mons Meg.

stantial modern artillery waggons, the highly ornamental but narrow gateway was demolished in the beginning of the present century, and one-half of its sculptured panel, figured here, now sur-

mounts the entrance to the Ordnance Office in the Castle. At the left side is the famed Mons Meg—or, as she is designated in the list of ordnance delivered to Monk, on the surrender of the Castle in 1650, "*The great iron murderer, Muckle Meg*"—mounted, in all probability, on her "new cradill, with xiii stane of irne graith," which, as we learn from the Treasurer's accounts, was provided in 1497, not long after her safe return from the siege of Dumbarton Castle. This remarkable piece of ordnance is not cast like a modern cannon, but built of wrought iron hoops and bars, or staves, and with a narrow fixed chamber in the breach for containing the charge. It appears to be of enormous strength; but after doing good service for upwards of two centuries, both in peace and war, it burst on the 29th October 1680, when firing a salute in honour of James, Duke of York, on his arrival in Edinburgh; an occurrence which, as Fountainhall records, failed not to be regarded as an evil omen. This mode of fashioning artillery with separate staves and hoops is the oldest method of which we have any account, and was probably universally employed on the first introduction of gunpowder in constructing what our old Scottish poet designates, in the earliest known allusion to field artillery, *crakys of war*. This curious reference of the old metrical historian, Barbour, is to the first expedition of Edward III. against the Scots in 1327, and consequently may be accepted as fixing the precise date of the introduction of artillery into Scotland:—

"Twa noweltyeis that dai thai saw,
That forouth in Scotland had been nane;
Tymmris for helmys were the tane,
That t'other crakys wef of war,
That thai before heard never er:
Of thai tua things thai had ferly
That nycht thai walkyt stalwartly."

Among the specimens of ancient pieces of ordnance in the Scottish Museum is a curious pair of cannons, built in a similar manner to Mons Meg, with hoops and staves of iron, bound with copper, measuring each twenty-nine inches in length, and designed for mounting on one stock. This double cannon was formerly stationed on the walls of Wemyss Castle, Fifeshire, and is said to have belonged to the celebrated Scottish admiral, Sir Andrew Wood of Largo. Double guns of the same description, mounted on one carriage, are figured in the beautifully illuminated MSS. of Froissart, believed to have been executed about the beginning of the fifteenth century. They are also

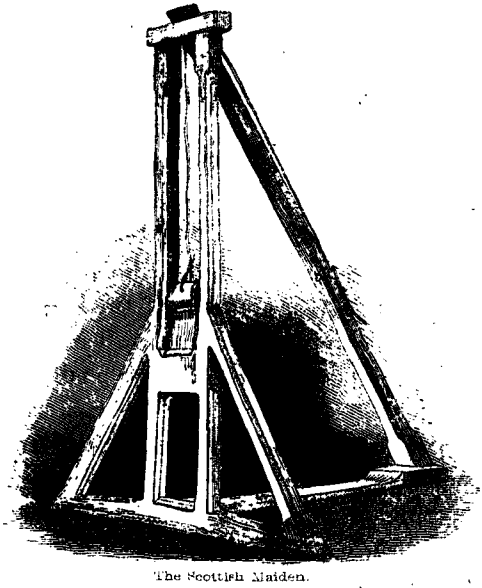
shewn on wheel carriages among the Scottish artillery at the battle of Pinkie in a very curious print belonging to the Bannatyne Club, entitled, "*The Englishe victore agaynste the Schottes, by Muskelbroghe*, 1547." Another piece of ancient artillery in the Scottish collection consists of a still more complicated group of cannons of similar construction, four being mounted on one carriage, and the whole united by an iron rod at the breach. They are evidently designed to be fired at once, so as to discharge a broadside on the enemy; and however tardy and inconvenient the reloading of these pieces may have been, the first broadside from a park of such artillery must have had no slight effect on an advancing foe.

The second half of the curious sculptured memorial of ancient Scottish artillery in Edinburgh, divorced from the group which includes Mons Meg, on the demolition of the barrier gateway in 1800, lay long neglected and buried in rubbish. It was at length rescued from impending destruction, and safely lodged in the Museum of the Scottish Antiquaries. It includes a singular group of ancient ordnance and warlike appliances; chamber pieces or patereros, with chambers or moveable breeches—frequently used separately for throwing small shot; bombards, chiefly employed for throwing great stones; a curious hexagonal cannon of large proportions, constructed, it may be presumed, of separate bars; hand-cannons, or the earliest class of portable fire-arms; with linstocks, shot, barrels of powder, &c. Along with these are also large guns of symmetrical form, which may be presumed to represent brass cannon, as the art of casting cannon was introduced at a much earlier period than the date suggested for the rebuilding of the barrier gateway, though it is by no means improbable that the sculpture may have belonged to a still older structure. Cannon are said to have been cast even in the middle of the fourteenth century;[1] and a brass cannon is still preserved at Toulouse, made in the year 1438.

One other class of relics, singularly characteristic of medieval customs and civilisation, includes the instruments both of punishment and of torture, of which Scotland may lay claim to the questionable boast of having some peculiarly national examples. At a period when criminal punishment avowedly assumed the character of retaliation and revenge, and when torture was recognised as a legitimate means of eliciting evidence, Scotland was not behind the other countries of Europe in the full use of both. The execution at Edinburgh, in 1436,

[1] Archæologia, vol. v.; Ibid. vol. xxviii. pp. 383, 385.

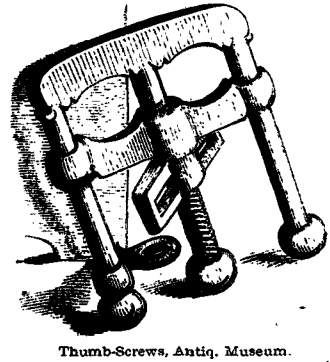
of the murderers of James I., the poet king, and especially the horrible scenes attending on the death of Sir Robert Graham and the Earl of Athole,—crowned, in fearful mockery, with a red-hot iron diadem as king of traitors,—sufficiently illustrate the ferocious spirit which went hand in hand with medieval chivalry. One of the most curious historical relics of this class is the Scottish Maiden, employed, so far as we know, for the first time in the execution of some of the inferior agents in the assassination of Rizzio. By this instrument were beheaded the Regent Morton, Sir John Gordon of Haddo, President Spottiswoode, the Marquis and Earl of Argyle, and many more of the noblest and best blood in Scotland. The Earl of Argyle is reported to have said, with a grave humour worthy of Sir Thomas More: it was the sweetest maiden he had ever kissed. It now forms one of the most remarkable national relics in the Scottish Museum, having, it may be presumed, performed its last office as the instrument of death. It is impossible to look without feelings of peculiar interest upon this ancient Scottish guillotine, so directly associated with the great of past ages; though the vindictive spirit which sought at times to give an added ignominy to a violent death cheated it of the blood of the gallant Kirkaldy, of Montrose and Warriston, as well as of others of lesser note, who figure in the Scottish chronicles of the sixteenth and seventeenth centuries.



The Scottish Maiden.

The Boots and Thumbkins are two instruments of judicial torture, especially associated in Scotland with the sufferings of the Covenanters during the reign of Charles II. Neither of them, however, were invented so recently. Torture, which the Roman law permitted only to be used in compelling the evidence of slaves, bore no such limitation in medieval Europe; and the name of *the Question*, commonly

applied to it, abundantly shews the direct purpose for which it was employed. Examples of this barbarous mode of seeking to elicit the truth are frequently to be met with in the earlier Acts of Sederunt of the Court of Session: as in a case of suspected perjury, 29th June 1579, where the King's Advocate produces a royal warrant for examining "Jhone Souttar, notar, dwelland in Dundee, and Robert Carmylie, vicar of Ruthwenis, witnes in the action of improbatioun of ane reversioun of the lands of Wallace-Craigy; and for the mair certane tryall of the veritie in the said matter, to put thaim in the buttis, genis, or ony uther tormentis, and thairby to urge them to declair the treuth." One pair of thumb-screws in the Scottish Museum, of unusually large size, is said to have been the instrument employed by the authorities of the ancient burgh of Montrose for eliciting confession; and a ruder pair, of peculiar form, in the Abbotsford collection, is figured in the illustrated edition of the Waverley Novels.[1] Sir Walter Scott has given fearfully vivid life, in his "Old Mortality," to the tribunal of the Scottish Privy Council, where such horrible appliances were last in vogue. Happily they too are consigned to the cabinet of the antiquary, telling of times which are, we may hope, as truly left behind as the aboriginal Stone Period, with its primitive arts and superstitions, and its simple sepulchral rites.



Thumb-Screws, Antiq. Museum.

The Scottish JOUGS and BRANKS are old instruments of punishment, popularly associated, for the most part, with judicial visitations of a more homely and less revolting character than those previously referred to, though not altogether free from sterner associations. The jougs, which consist of an iron collar attached by a chain to a pillar or tree, form the corresponding Scottish judicial implement to the English Stocks: applied, however, not to the legs or arms, but to the neck. They are still to be met with attached to the porch of our older village churches, or occasionally to some venerable tree in the surrounding churchyard, their application having been most frequently reserved in the olden time for the enforcement of ecclesiastical discipline. The woodcut represents a fine old pair of jougs, the property

[1] Abbotsford Edition, vol. ii. p. 24.

of Sir William Jardine, Bart., which were found imbedded in a venerable ash tree, recently blown down, at the churchyard gate, Applegirth, Dumfriesshire. The tree, which was of great girth, is believed to have been upwards of three hundred years old, and the jougs were completely imbedded in its trunk, while the chain and staple hung down within the decayed and hollow core. The more usual form of the jougs is simply a flat iron collar with distended loops, through which a padlock was passed to secure the culprit in his ignominious durance. Along with this may be mentioned a singular and probably unique relic of old Scottish judicature, preserved in the Museum of the Scottish Antiquaries, to which it was presented in 1784. It consists of the brass collar of a Scottish slave of the eighteenth century. The collar is inscribed in accordance with the terms of the following verdict, which shews that the case was not singular; and having been dredged up in the Frith of Forth, it seems sufficiently probable that the unhappy victim may have chosen death in preference to the doom from which there was no other release.

Jougs, Applegirth.

"At Perth, the fifth day of December 1701 years, the Commissioners of Justiciary of the south district, for securing the peace of the Highlands, considering that Donald Robertson, Alexander Steuart, John Robertson, and Donald M'Donald, prisoners within the Tolbooth of Perth, and indicted and tried at this court, are by verdict of the inquest returned, GUILTY OF DEATH; and that the Commissioners have changed their punishment of death to perpetual servitude; and that the said pannells are at the court's disposal. Therefore the said Commissioners have given and gifted, and hereby give and gift, the said Alexander Steuart, one of the said prisoners, as ane perpetual servant to Sir John Areskine of Alva, recommending him to cause provide an collar of brass, iron, or copper, which by his sentence or doom, (whereof an extract is delivered to the magistrates of the said burgh of Perth,) is to be upon his neck with this inscription: ALEXR. STEUART, FOUND GUILTY OF DEATH FOR THEFT, AT PERTH, THE 5TH OF DECEMBER 1701, AND GIFTED BY THE JUSTICIARS AS A PERPETUAL SERVANT TO SIR JOHN ARESKINE OF ALVA; and recommending also to him to transport him from the said prison once the next week; and the said Commissioners have ordained and hereby ordain the magistrates of Perth, and keeper of their Tolbooth, to deliver the said Alexander Steuart to the said Sir John Areskine of Alva, having the said collar and inscription conform to the sentence of doom foresaid."[1]

[1] From a copy in the possession of Alexander Macdonald, Esq.

From another deed of gift, it appears that Donald M'Donald was bestowed in like manner on John Earl of Tullibardine.[1] No doubt the other two were similarly disposed of by gift, if not by positive sale—so very recently was slavery a part and parcel of Scottish law: feudal customs, and the singular ideas incident to the peculiar social state of the Highlands, having remained little affected by all the changes wrought on the Lowland Saxon and the Southron, until the final overthrow of the clans on Culloden Moor abruptly broke the traditions of many centuries.

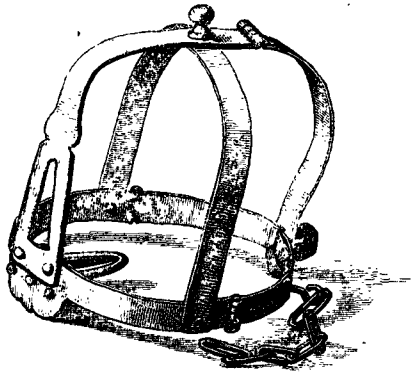
The BRANKS is another Scottish instrument of ecclesiastical punishment, chiefly employed for the coercion of female scolds, and those adjudged guilty of slander and defamation. It may be described as a skeleton iron helmet, having a gag of the same metal, which entered the mouth and effectually *brankit* that unruly member—the tongue.[2] It is an instrument of considerable antiquity, and has probably not unfrequently been employed for purposes of great cruelty, though in most examples the gag is not designed to wound the mouth, but only to hold down the tongue. In the Burgh Records of Glasgow, for example, under date of April 1574, "Marione Smyt and Margaret Huntare" having quarrelled, they appear, and produce two cautioners or sureties, "þat þai sal abstene fra stryking of utheris in tyme cuming, under þe pane of x lib., *and gif thai flyte to be brankit.*"[3] One very complete specimen still preserved at St. Mary's Church, St. Andrews, is popularly known as the Bishop's Branks, and is usually said to have been fixed on the head of Patrick Hamilton and of others of the early Scottish martyrs who perished at the stake during the religious persecution of James V.'s reign. This tradition, however, is not borne out by history in the case of Hamilton, and is probably the addition of a later age, though the instrument may possibly have supplied both Archbishop and Cardinal Beaton with a ready means of restraining less confirmed recusants, and thereby nipping the new heresy in the bud. But the real origin of its present title is to be traced to the use of it in much more recent times, by Archbishop Sharp, for silencing the scandal which an unruly dame promulgated openly against him before the congregation. A view of the Bishop's Branks is given in the Abbotsford edition of *The Monastery*, where it is described as for-

[1] Transactions of the Society of Antiquaries of Perth.

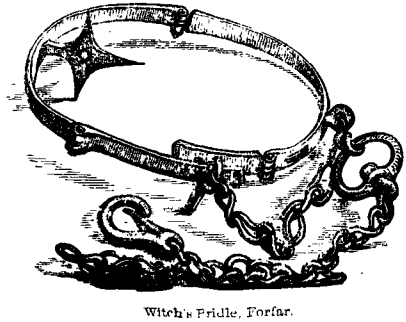
[2] *To brank*, to bridle or restrain. *Vide* Jamieson's Scot. Dict.

[3] Burgh Records of Glasgow, p. 7.

merly kept at St. Mary's Church. It still remains there, in the custody of the sexton, and is regarded with such general interest as is likely to secure its preservation. The annexed woodcut is drawn from another example, which was discovered in 1848 behind the oak panelling in one of the rooms of the ancient mansion of the Earls of Moray, in the Canongate, Edinburgh. The term *Branks*, it may be added, is also used in Scotland to designate a rude substitute for a horse's bridle and bit, formed most frequently of a halter and stick. Some few years since the frightful instrument represented below was preserved in the old steeple at Forfar, where it bore the name of the *Witch's Branks* or *Bridle*, and is described in the Old Statistical Account of the parish of Forfar as the bridle with which the wretched victims of superstition were led to execution. The field, it is added, where they suffered is pointed out to strangers as a place of curious interest. The witch's bridle was carried off from Forfar to add to the antiquarian treasures of the late well-known collector Mr. Alexander Deuchar of Edinburgh. The date 1661 is punched on the circle, along with what seems to read ANGUS S.[1] The object aimed at in applying so dreadful a gag to those who were condemned to the stake as guilty of witchcraft and dealing with the devil, was not so much the purposed cruelty which its use necessarily involved, as to prevent the supposed possessors of such unearthly gifts from pronouncing the potent formula by means of which it was implicitly believed they could transform themselves at will to other shapes, or transport themselves where



The Branks, Moray House.



Witch's Bridle, Forfar.

[1] Sir J. G. Dalyell's Darker Superstitions of Scotland, p. 686.

they pleased, and thus effectually outwit their tormentors. It furnishes a melancholy index of the barbarism which prevailed in our own country at so very recent a period, that educated men could be found to give credit to such follies, or that even among the most illiterate and rude, executioners could be enlisted to apply to a woman an instrument the very picture of which is calculated to excite a shudder.

It would not be difficult to add to these common instruments of punishment and of torture others equally characteristic of the spirit of the age, though not brought into such general use. Registers of various kirk-sessions recently printed by the Abbotsford Club, the Spottiswoode Society, and others of the Scottish literary book clubs, disclose much curious evidence of the petty tyranny and cruelty too frequently exercised by these courts in the enforcement of ecclesiastical discipline, most frequently by means little calculated to promote reformation or good morals. In these, however, as in the traces of earlier manners which we have sought to recover, the historian finds a key to the character of the age to which they belong, and indications of its degree of advancement in civilisation, such as no contemporary historian could furnish, since it supplies elements for comparing and for contrasting the present with the past, no less available than the rude pottery and the implements of flint or bone which reveal to us the simple arts of aboriginal races. The great difference in point of value between the two classes of relics is, that those more recent indices of obsolete customs supply to us only an additional element wherewith to test and to supplement the invaluable records which the printing press supplies, while the latter are the sole chronicles we possess of ages more intimately associated with our human sympathies than all the geological periods of the preadamite earth.

CHAPTER X.

CONCLUSION.

In the two previous chapters, as well as in that devoted to medieval ecclesiology, some of the later exemplars of Scottish arts and civilisation have been glanced at, coeval with many authentic historical documents, to which the researches of the antiquary can only add supplementary illustrations. These, however, though legitimately included in the compass of archæological investigations, do not strictly come within the plan of this work, except in so far as they suffice to illustrate the remarkable contrast, both in character and historical value, of the antiquities of the Primitive and Medieval Periods. Viewing Archæology as one of the most essential means for the elucidation of primitive history, it has been employed here chiefly in an attempt to trace out the annals of our country prior to that comparatively recent medieval period at which the boldest of our historians have heretofore ventured to begin. The researches of the ethnologist carry us back somewhat beyond that epoch, and confirm many of those conclusions, especially in relation to the close affinity between the native arts and Celtic races of Scotland and Ireland, at which we have arrived by means of archæological evidence. Of the six Celtic dialects known, either as living languages or preserved in books, the Irish and the Scottish Gaelic most nearly approximate, the former being to a great extent only a cultivated and more artificial modification of the other. The Manx dialect, though belonging to the same subdivision, differs much more considerably from both, representing, it may be assumed, the northern Celtic tongue prior to the intrusion of the Scoti into Ireland, or their later colonization of Dal-

riada. Again, the three several dialects of the Celtic idiom of the ancient Britons, the Welsh, the Cornish, and the Armorican, differ essentially from all these; thus clearly indicating the early separation which took place between the Southern Celtic Britons and the Picts, and the modification of the peculiar characteristics of the latter by local influences in which the former bore no share. In all these respects the conclusions of the ethnologist receive not only confirmation but much minute elucidation from archæological research. But we have found from many independent sources of evidence, that the primeval history of Britain must be sought for in the annals of older races than the Celtæ, and in the remains of a people of whom we have as yet no reason to believe that any philological traces are discoverable, though they probably do exist mingled with later dialects, and especially in the topographical nomenclature, adopted and modified, but in all likelihood not entirely superseded by later colonists. With the earliest intelligible indices of that primeval colonisation of the British Isles our archæological records begin, mingling their dim historic annals with the last giant traces of elder worlds; and, as an essentially independent element of historical research, they terminate at the point where the isolation of Scotland ceases by its being embraced into the unity of medieval Christendom.

The subdivision of historic periods here indicated is by no means peculiar to Scotland. The isolation of the elder nations was universal prior to the diffusion of Christianity. Egypt, Nineveh, Babylon, Tyre, Judea, Greece, Carthage, and even Rome, each stood solitary amid its vastest conquests. It was reserved for the Popedom—that great fact of medieval history—to create a unity by means of which the isolation of the nations came to an end without the sacrifice of their individuality. But that also was no final stage in the world's history; and though the shadow of Papal supremacy still lingers as a medieval relic which has outlived its use, time has developed nobler elements of unity, in harmony with the true spirit of modern nationality. In nothing is the practical character of modern scientific discovery and mechanical skill—the steam-engine, the railway, the electric telegraph—more apparent than in its antagonism to this antiquated isolation of the nations. Between the modern and the primeval periods, the medieval era interposes as the long stage of transition in which the transforming influences of the new faith were changing the whole social fabric, and moulding it into higher forms.

But as these things of the past have made way for the time which is, so too must it give place, as a transition time and the precursor of a still brighter future. The world itself is a transition stage, and all sublunary things are but the preparatives for a mightier futurity. Viewed as a part of the great cosmical history of which geology has recovered so many chapters, the labours of the archæologist seem to add but a few stray leaves. The strata of the earth's crust, deep as we can penetrate, or lofty as we may climb, are filled with the evidences of the organic life of preadamite orders of being; but it is only in the latest diluvial superficies that we detect those traces of our own race, which thus so unmistakably announce that man is but of yesterday. If, however, the isolated individuality of the elder nations of the world's history confers on each of them an interest which we seek for in vain in those of the medieval era of transition, man also has a peculiar individuality which gives a value to the most perishable relics he casts behind him in his brief lifetime. To the geologist one perfect example is a certain type of its species, and hence a complete geological collection is a conceivable thing; but it is not so with the labours of the archæologist. He aims at recovering a clue to the esoteric no less than to the exoteric indices of past generations, and sees in each varied relic the product of human thought, invention, and intelligent design. Each human being of all the past ages, born into time as an immortal being, had a personality and a destiny which give to whatever traces may be recoverable of him an interest for all time. Minutest variations may be the fruits and evidence of a mental labour never repeated, and each device of fancy or caprice may contain a clue to the character of the individual mind,—a reflex, as it were, of the individuality, of the psychical physiognomy of its originator. If we except, indeed, the treasures of the numismatist,—which are, strictly speaking, a branch of written history,—there are no true duplicates in the collection of the archæologist. His researches are conducted in a boundless field, since their novelty is as inexhaustible as the phases of human thought. Nor can the archæologist forget, while thus reviewing his own study as a branch of human knowledge, and seeking for it its just place among the Sciences, that he is little likely to overestimate the dignity of a pursuit which embraces within its aim the primal history of man.

The geologist, devoutly scanning the records of earlier Creation, traces onward the development of higher organizations, not as an

embryonic life, passing by some innate or self-generated law of vitality from the fœtal and immature to more perfect and higher states of being, but as successive ideas of the Divine Creator thought out into a recorded actuality; while each, by its embryonic organization, or by its manifestations of the lower nature of a preliminary and imperfect dispensation, reveals the mind of the Creator, and purposely foreshadows the "better things to come." Literal types are these, but shadows also pointing onward from the first days in that uterine week of Creation when the Spirit of God moved on the face of the deep, and the formless and the void became instinct with successive orders of being, until at length man was made in the Divine image, and God rested from his work. Into the original moral condition of that most perfect fruit of Creation thus born in the fulness of time, it is not our province here to enter. Archæology, in a peculiar sense, deals with man mortal, not immortal—with man not as he was made at first, "upright," but as the seeker out of "many inventions;" and as such he too appears to us, like the elder offspring of Creation, in an embryonic state, from which we follow him upward step by step until we recognise in the present an harvest of all the past. The Archaic Period presents, indeed, as one of its most peculiar characteristics, the abundance of native gold, but the true GOLDEN AGE OF MAN lies before him, not behind. Some nations do appear from the very dawn of history possessed of a singularly developed civilisation. Such, however, was indispensable to the existence of any history not purely mythic or archæological; while in the very oldest of these we discover also the traces of a still earlier embryonic period through which they have passed.

A general system of Archæology remains as yet a desideratum. Egypt stands alone in its strange old civilisation, as if, Minerva-like, it had sprung forth at once a maiden nation, endowed with arts, polity, and an organized social system; but even its unwritten history, we have seen, retains the traces of an antehistoric Stone Period —a childhood in common with the world's younger commonwealths. Heretofore, however, the infancy of nations has been, for the most part, contentedly left in the wrappages of their first swaddling myths. Of Asia our knowledge of its primitive archæology is only by means of the merest fragmentary and isolated data, which can piece into no coherent system. India and China reveal much that illustrates the maturity of an elder and superseded period, but nothing as yet that

takes hold of the beginnings of things. Nineveh and Babylon have recently yielded up strange and most interesting records of the past; but the more minutely we investigate these, the less reason we find for imagining that they pertain to the infancy of Asiatic nations. The primeval archæology of Asia remains yet to be explored. It must not be sought for among the deserted scenes of barbaric pomp and oriental magnificence, on the banks of the Tigris or the Euphrates, but in the northern steppes, and on the less hospitable heights, and the outlying valleys which skirt the seats of elder empire. There truths of the deepest importance in relation to the history of man still lie recorded in undeciphered annals. There only can we hope to find the types which have been repeated, with endless variations, by the later wanderers, not only into Europe, but throughout the diverse regions of the New World. When this branch of knowledge has been thoroughly explored, we shall possess a new argument for the unity of the human race, not less conclusive than any which the ingenious learning of the philologist has supplied. Of another chapter in the progress of man, bearing more directly on the elucidation of the ante-historical period of Europe, that of the north-western migration from central Asia, a comprehensive general system of archæology has yet much to reveal. We owe to the Asiatic researches of Humboldt a clear understanding of the systems of mountain chains, both of Europe and Asia, which have exercised so important an influence on the distribution of the entire Fauna of the two continents. A remarkable simplicity of structure is discernible in the arrangement of the continuous lines of greatest elevation, which strikingly coincides with the traces we can recover of the route pursued by the successive nomadic waves of population which have passed from Asia to Europe. These chains of abrupt elevation, which appear to have served as natural tracts, within the defined limitations of which the nomade races were urged onward by as natural a law as the river is borne seaward in its channel, are composed of four great systems of mountains, almost uniformly directed from west to east, and parallel with the greatest length of the continent. These are the Altai, the Thian-shan, the Kuenlun, and the Himalaya. A glance at the map of Asia, and especially at the admirable physical charts prepared by Mr. Alexander Keith Johnston, shews with singular precision the courses of continuous migration, the localities where mountain barriers arrested for a time some portion of the migrating nomades, as in the

eddies of a stream, and the vast yet isolated steppes in which they may be assumed to have settled down for ages, and become the centres of later migratory offshoots, tending ever to the north-east. Tracing again the influence of the geographical features of the old world at the imaginary line of separation between Europe and Asia, we discern the physical causes of known historical facts. We see the inevitable course of the old patriarchal tribes, from the table-land of Iran, and the great Asiatic peninsulas beyond, directly to Asia Minor and the narrow Straits of the Dardanelles, while the table-land of Syria and Arabia is shut in to the western shores of Palestine, the seat of Tyre and of Judea. Northward of this the Caspian Sea seems placed as it were to exclude the wanderers for a time from their final settlements. South of it a narrow shore appears to be the appointed channel by which one early stream passed along the continuous line of the Kuenlun chain to the base of the Caucasus, and from thence reached the ancient scenes of Pelasgian colonization. But it is by the wider gorge, to the north of the Caspian Sea, that the great nomadic tide must have flowed, while we see there the Ural chain stretching southward to limit the European portal of colonization, and to arrest and detain the wanderers who pursued a more northerly course. Herein, therefore, may be discovered the geographical elements in which important ethnological distinctions have had their rise, while at the same time the archæologist discovers in it an additional motive for pursuing his researches into the primitive antiquities of the great northern Asiatic steppes, where the true key to the sources of European primeval archæology, we cannot doubt, is yet to be found.

Of this comprehensive system of antehistorical research the Archæology of Scotland forms the merest fractional item. It is indispensable, however, for the integrity of the whole; and as I believe that it is not at Babylon or Nimrud, but in the northern steppes of Asia, that the primeval history of the elder continent must be sought, so also it is not in the annals of Greece or Rome, or in the antiquities of the adjacent kingdoms, modified by their arts and arms, but in Ireland, Scotland, and the Scandinavian countries, that we may hope to recover the unadulterated first chapters of European history. The precise conclusions to which we have been led, in relation to Scottish Archæology, are such as amply accord with this idea. The Celtæ, we have seen reason to believe, are by no means to be regarded as

the primal heirs of the land, but are on the contrary comparatively recent intruders. Ages before their migration into Europe, an unknown Allophylian race had wandered to this remote island of the sea, and that in its turn gave place to later Allophylian nomades, also destined to occupy it only for a time. Of these antehistorical nations Archæology alone reveals any traces. Hitherto both the historian and the ethnologist have ascribed their remains to the later Celtæ, the first historical race of Northern Europe, introducing thereby confusion and cumulative error into all reasoning on their data. These elements of history can only be rectified and properly adjusted when the primitive archæology of the various countries of Europe has been sifted and treated in detail, and when each subdivision has been traced to its origin, and most probably to its Asiatic source. We need not doubt that an abundant phalanx of workers will ere long be found enlisted in this interesting field of research. The mere gathering of curious rarities commanded but a limited sympathy, while their possession was the sole end to be attained, and the gratification of an impassive acquisitiveness superseded the search for truth. The fossil encrinite or the "witch bead"[1] was equally singular and valueless, so long as it was merely an incomprehensible *lusus naturæ*. But when it came to be recognised as the index to the history of a whole genus of radiated polypes, both recent and fossil, it was taken from the novelties of the curiosity-hunter, and permanently classified among the illustrations of natural science. It were easy to shew why it is that we have been slower in turning to account the no less manifest illustrations of the history of the *Bimana*, first order in the class of mammals. Some of the sources of this tardy recognition of their value have already been glanced at; but it is sufficient that we are now learning to discover their true use, and are at length aiming at the recovery of a just view of man as a rational and immortal creature, by means of the perishable trappings which he throws off behind him, in his passage across this probationary stage of being. We are all conscious of passionate longings after a knowledge of the past, no less than of an instinctive desire to search into the future. Man "looks before and after," he feels himself no isolated being, but one link in a vast chain, the ends of which stretch away

[1] *Witch beads, Fairy beads, St. Cuthbert's beads*, are all names by which the *Entrochi*, or joints which compose the stem of the *Encrinite* or Stone Lily, are popularly known in various districts of Scotland and the north of England.

immeasurably into the past and the future; and while he discovers in the preadamite periods of creation a preparatory dispensation, he recognises in his own period a more perfect one, not because he conceives it to be final, but because he knows it to be probationary, and the preliminary to that which is perfect. Thus, by thoughts in which the antiquary dwells on the yet undeveloped designs of the Ancient of Days, does he perceive a new dignity and sacredness in pursuits which not the ignorant only have heretofore deemed puerile and worthless, recognising in them the means of recovering lost links in that chain by which such mighty truths depend. He looks upon the shadowy past by the clearer light of the future; and while the revelation of "life and immortality" adds a new force to his convictions of the unity which pervades creation, and is manifested in Providence, it also stimulates with a more lively energy his desire to lay hold upon "the evidence of things not seen."

INDEX.

Aberbrothoc Abbey, 617.
Aberdeen, the Cathedral of St. Machar, Old, 628.
Aberdeen, St. Nicholas' Church, 649.
Aberdeenshire, 37, 51, 53, 71, 74, 78, 111, 113, 121, 157, 265, 283, 287, 293, 301, 305, 413, 419, 434, 439, 462, 497, &c.
Aberlemno Stone, 497, 498, 499.
Achir-na-Kyle, Burgh of, 422.
Achnacreebeg, 67.
Adair, John, the Geographer, 578.
Adder-beads, 304.
Adder Stone, 140.
Airswood Moss, 61.
Alaterva. *Vide* Cramond.
Alauna Fluvius, 384.
Albanic Duan, 468, 478, 479.
Albanich, 195, 472.
Albiones, 195.
Alexander I., 604, 608, 610.
Alexander II., 534.
Alexander III., 618, 679.
Alexander the Great, Coin of, 200.
Alfred the Great, 213.
Alloa, 311, 313, 496.
Allophyliæ, 161, 205, 343, 701.
Almond, River, 392.
Alvie, Parish of, 142,
Amber, 304.
Ambries, 637.
American Antiquities, 102, 127, 134, 158, 210, 340, 417, &c.
American Crania, 167.
Amulets, 140, 298, 439.
Amusements, 562.
Analyses of Bronzes, 240-249.
Anglo-Saxon Architecture, 584.
Anglo-Saxon Barrows, 58.
Anglo-Saxons, 470.
Angul, 9.
Angus MacFergus, 473.
Angusshire, 262, 495, &c.
Animal-shaped Sacred Vessels, 556.
Annan Street, 334.
Annandale, 334, 394, 397, 411, 458, 679, &c.
Annular Ornament, 445.
Antimony, 196.
Antiquaries, Danish, 8, 17, 271, 461.
Antonine Wall, 365, 372.
Anwoth Parish, 542.
Applegirth, Jougs of, 691.
Archæology, Classification of, 18.
Archæology, connexion with Geology, 6, 21, 38, 697.
Archaic Period, 191.
Archaic, the Definition, 339.
Architecture, Historic value of, 408.
Architecture, Medieval Ecclesiastical, 600.
Architecture, Primitive, 74, 103.
Architecture, Primitive Ecclesiastical, 582.
Ardchattan, Cromlech at, 67.
Ardersier Point, 263.
Ardnadam, 67.
Ardoch Camp, 34.
Argyleshire, 63, 67, 71, 76, 122, 129, 132, 253, 262, 266, 270, 309, 316, 410, 448, &c.
Armagh, Bell of, 656.
Armillæ, Bronze, 325, 446.
Armillæ, Gold, 307, 316, 320, 324, 424.
Armillæ, Silver, 443.
Armour, Bronze, 268.
Armour, Iron, 435.
Armour, Medieval, 574.
Arran, 66, 530.
Arrow-heads, Flint, 124, 126, 185, 212, 446.
Arthur, King, 501, 502.
Arthur Seat, 228, 283, 285.
Arthur's Oon, 370, 598.
Asiatic Antiquities, 204, 218, 360, 477, 699.
Aspatria, Cumberland, 312.
Assyrian Antiquities, 204, 255, 282.
Astarte, the Syrian Goddess, 201.
Astronomy, Science of, 4.
Auchindavy, 277, 372.
Auchmacher, Hill of, 293.
Auld Wives' Lift, 66.
Axe-blades, 253.
Axes, Stone, 134, 136.
Ayrshire, 31, 61, 142, 267, 300, 333, 410, 457, 678, &c.
Aztecks, 167, 210.

Badenoch, 413.
Balgone, 279.
Ballat, Moss of, 395.
Ballinasloge, Discovery of Gold at, 207.

Balls, Stone, 138, 563.
Ballutheron, 561.
Balmaclellan, Parish of, 563.
Banca, Island of, 196.
Banchory-Devenich, Parish of, 121, 167, 283.
Banffshire, 61, 142, 311, &c.
Bannockburn, Field of, 39, 437, 685.
Barcly, Moor of, 60.
Barmekyn of Echt, 415.
Barnair, Valley of, 61.
Barnkirk, Moss of, 31.
Barrach, 439.
Barrows, Anglo-Saxon, 58.
Barrows, Classification of Scottish, 44.
Barrows, Classification of English, 43.
Barry Hill, 501.
Basin, Stone, 149.
Basques, 11.
Battle-Axe, Ancient, 685.
Battle-Axe, or Bill, Ancient, 438.
Beaded Torc, 449.
Beads, Glass, 303.
Beads of Shale, 179.
Bear, Cave, 23.
Beauly, Frith of, 63.
Beaver, 24, 193.
Bede, 594.
Belt Clasp of Shale, 300.
Beltane, Scottish Festival of, 418.
Beregonium, 63.
Berwickshire, 245, 437, 444, &c.
Bill, Ancient, 438.
Bilton, Yorkshire, 231.
Bell Barrow, 54.
Bell, Kilmichael-Glassrie, 652.
Bell of Ballynaback, 656.
Bell of St. Columba, 654.
Bell of St. Fillan, 662.
Bell of St. Kenanach, 663.
Bell of St. Kentigern, 659.
Bell of St. Kessogius, 661.
Bell of St. Lolanus, 661.
Bell of St. Meddan, 661.
Bell of St. Ninian, 660.
Bell of St. Ternan, 662.
Bell, Perthshire, 658.
Berkshire, 213.
Birrens, 368, 396, 397, 400.
Birrenswork Hill, 277, 397, 457.
Black Knowe, 55.
Black Moss, 63, 76.
Blackadders of Tullyallan, 279.
Blackerne, 443.
Blair Drummond Moss, 33, 70, 129, 152, 222.
Blatum Bulgium, 368, 370, 396 400.
Boadicea, 392.
Boar, Wild, 144.
Bodkins, Bone, 143, 219.
Bodkins, Bronze, 515.
Bodkins, Gold, 328.
Bodkins, Silver, 515.
Bog Iron Ore, 359.
Bogheads of Kintore, 301.
Bone Arrow-heads, 184.
Bone Bodkins, 143, 219, 433.
Bone Dagger, 141.
Bone Implements, 83.
Bone Lance, 33, 142.
Bone Ornaments, 155.
Bonnington Mains, Cromlech at, 67.
Bookan, Ring of, 45.
Boots, the Scottish, 689.
Borthwick, Parish of, 285.
Bos Longifrons, 24, 382.
Bos Primigenius, 23, 25.
Boss Cairns, 60.
Boss of Shield, 436, 440, 441, 456, 553.
Bothwell, Collegiate Church of, 625, 627.
Bouchard, M., 5.
Bowes, Yorkshire, 311.
Bowl Barrow, 54.
Braccata, Gallia, 337.
Bracelets, Bronze, 325, 446.
Bracelets, Gold, 307, 316, 319, 322, 324.
Bracelets, Silver, 443.
Braco, 200.
Bracteates, Silver, 520.
Branks, The, 690, 692.
Branks, The Bishop's, 692.
Brass, Celtic, 239.
Brasses, Sepulchral, 649.
Brazen Age, 204.
Breacan, 337.
Brechin. *Vide* Round Tower.
Brechin Cathedral, 595.
Brick-making, Origin of, 364, 369.
Bridekirk, Font with Runic inscription at, 550.
Brigantia, the Goddess, 277, 397.
Britanni, 195.
Broadford Bay, 157.
Brogar, Bridge of, 107.
Brogar, Ring of. *Vide* Stennis.
Broidgar, Knowes of, 44, 444.
Bronze, Analyses of, 238-249.
Bronze Implement, Curious, 269.
Bronze, Original source of, 203, 238.
Bronze Period, 191.
Bronze Reaping-Hooks, 269.
Bronze Rings, 227.
Bronze Spear-heads, 226, 232, 241, 288.
Bronze Swords, 226, 228, 242, 245, 247, 264.
Bronze, The Introduction of, 202, 238, 338.
Bronze Weapons, 250.
Brooch, Celtic, 219, 504, 559, 560.
Brooch, Dunipace, 530, 559.
Brooch, Glenlyon, 220, 560.
Brooch, Hunterston Runic, 524.
Brooch, Lorn, 220, 560.
Brooch, Oval, 301, 523, 553, 554; *Pref.* xxiv.
Brough, Shetland, 149.
Bruce, Robert, The, 220, 560, 619, 671, 683, 684.
Bruce, Sir Michael, 370.
Bruce's Acres, 437.
Bruce's Howe, 419.
Bruntone, 61.
Buchan, 78.
Buchanness, 305.
Buittle, Parish of, 123.
Bunaw Ferry, 63.
Bunrannock, 447.

Burghar, Burgh of, 178, 424.
Burgh-Head, 411, 443.
Burghs, 420.
Burghs, Sepulchral Remains in, 423.
Burgie, 293.
Buteshire, 99, 530, 615.

Cadiz, Phœnician colony of, 197.
Cairn-a-vain, 141.
Cairnie, 53, 71.
Cairnlee, 64.
Cairnmore, 319.
Cairnmure, 317.
Cairns, 59.
Cairnwochel, 64.
Caithness, 139, 142.
Caithnesshire, 301, 420, 425, 523, 589, &c.
Caiy Stone, 95.
Caldale, 443, 521.
Calicinated Rings, 314.
Campbell, The Poet, 123.
Campbeltown, 262, 410.
Camp-Kettles, Bronze, 273, 274-279.
Camp-Kettles, Iron, 436.
Campsie Hills, 410.
Camus Stone, 93.
Candida Casa, 480, 582, 583.
Canmore, Malcolm. *Vide* Malcolm.
Cannons, Ancient, 687.
Cannons, Double, 687.
Canoes, Primitive, 30-32, 34-38.
Canute, King, 322.
Capricornus, 374.
Carinn, 231.
Carlinwark Loch, 31, 437.
Carlochan Cairn, 265.
Carluke, Parish of, 680.
Carmichael, 320.
Carmyle Hill, 309.
Carrington, Village of, 389.
Carron, River, 32.
Carstairs, 295, 440.
Carthaginian Antiquities, 198.
Cassiterides, 194.
Cassiteron, 195.
Castle Douglas, 437.
Castle Over, 411.
Castle Tellve, 421.
Castle Troddan, 421.
Castlecary, Roman Station of, 401.
Castlehill, Roman Station, 369, 375.
Castlemilk, 37, 438.
Castor Europæus, 24.
Castrum Alatum, 384, 390.
Cat Stanes, 95.
Caterthun, Brown, 412.
Caterthun, White, 412.
Cathkin Hills, 55.
Catt Stane, 96.
Cauldrons, Bronze, 274.
Causeway End, 437.
Caves, 88.
Cawdor Castle, 681.
Celt Moulds, 223.
Celtæ, 11, 472.
Celt-Axe, 252.
Celtic Arts, 220, 559.
Celtic Brass, 239.
Celtic Brooch, 219, 504, 559, 560.
Celtic Cranium, 163, 172.
Celtic Dialects, 472, 695.
Celtic Manners, 219, 504.
Celtic Metallurgists, 215.
Celtic Metallurgy, 406.
Celtic Palæography, 529, 534.
Celtic Pipes, 679.
Celtic Use of Runes, 528, 532, 534, 535.
Celts, Bronze, 224, 228, 242, 251, 255, 257.
Celts, Stone, 35, 106, 129, 135, 251.
Ceres, Parish of, 293.
Cetacea, Fossil, 24, 33.
Chain, Gold, 318.
Chain, Silver, 448.
Chairs, Stone, 531.
Chalice, Golden, of Iona, 669.
Chalice, Kirkwall, 667.
Chappelerne, 265.
Chariot, War, 455.
Charioteer, Tomb of a British, 456, 460.
Charlemagne, Chessmen of, 571.
Charlemagne, The Sword of, 211.
Charms, 140, 298, 439.
Cheese Wring, Cornwall, 272.
Chepman, Walter, 634, 636.
Chess, Game of, 565.
Chessmen, Lewis, 567.
Chesterlees Station, 318.
Chevron Ornament, 284, 289, 340, 608.
Child, Axelvold, 452.
Christian Period, 467.
Christiansborg, Palace of, 18, 311, 577.
Chroniclers, Medieval, 13.
Chronology, 2, 19.
Cinerary Urn, 69.
Cists, 69, 122, 179, 224.
Cists, Incised, 332, 334.
Cists, Oaken, 461-464.
Clach Bhuai, 140.
Clach Stein, 97.
Clachan of Inches, 114.
Clackmannanshire, 312.
Clasp of Belt, Shale, 300.
Classernish, Temple of, 115, 150.
Claymores, Ancient, 682.
Clerk, Sir John, 32, 61, 255, 261, 270, 315, 317, 458, 578.
Clog beanuighte, 656.
Clontarf, Battle of, 589.
Closeburn, 122.
Closeburn Hall, 278.
Cluinmore, 449.
Clyde, River, 34.
Cockenzie, 134, 142, 168.
Cockernonie, 452.
Coffin, Stone, 651. *Vide* Cists.
Coffins, Wooden, 176, 464.
Coil, King, 333.
Coilsfield, Incised Cist at, 332.
Coins, Anglo-Saxon, 443, 521.
Coins, British, 198, 213, 353.
Coins, Cufic, 521, 558.
Coins, Egyptian, 200.

Coins, Gaulish, 198, 353.
Coins, Greek, 200.
Coins of Cantium, 353, 375.
Coins of Cunobeline, 198, 213, 353.
Coins, Parthian, 200.
Coins, Primitive, 199, 353, 519.
Coins, Roman, 199, 383, 384, 387, 390.
Coins, Scottish, 433, 519.
Collessie, 454.
Combs, Bone, 424, 554.
Combs, Bronze, 300.
Comrie, 76.
Conigsburgh, 427.
Copenhagen, Museum of, 18.
Copper, 196, 202, 338.
Copper, Tools of, 203.
Corbiehall, 440.
Corn-crushers, 139.
Cornwall, 194, 197, 217, 360.
Coronation Stone. *Vide* Lia Fail.
Corrie Knows, 437.
Corslet, Gold, 272.
Corstorphine Church, 622.
Craig Phaidrick, 134.
Craigdarroch, 268.
Crakraig, 285.
Cramond, 366, 370, 383, 386, 390, 392.
Crania, 12, 160, 227.
Cranial Measurements, 165.
Crawfurd, Abbot, 611.
Crawfurd Moor, 216, 295.
Cree, Moss of, 252.
Cremation, 49.
Crinan, Abbot of Dunkeld, 491, 492, 603.
Cromdale, Parish of, 315.
Cromlech, 66, 271, 272.
Cromlech, Origin of, 65, 68.
Cromlix, 68.
Crosier, Bishop Tulloch's, 667.
Crosier, Fortrose Cathedral, 666.
Crosier of St. Fillan, 664.
Crosier of St. Molochus, 665.
Crosses, Stone, 497, 498, 509, 514.
Crosses, Stone, Isle of Man, 537.
Crossmichael, Parish of, 255, 265, 298.
Crowned Barrow, 56.
Cruden, 51, 157, 293.
Cruithne, 59, 430, 468, 470, 474, 477.
Cufic Coins, 521, 558.
Culbin, Sand Hills of, 446.
Culdees, 603.
Culloden, Field of, 63.
Culsalmond, Parish of, 462.
Culswick, Burgh of, 45.
Cummertrees, Parish of, 437, 454.
Cunobeline, 198, 213.
Cupar-Angus, Parish of, 263.
Cups, Drinking, 281.
Cups, Incense, 281.
Curiæ, 383, 390.
Currie, 383, 390.
Cymri, 477.

Dædalus, 210.
Dagger, Iron, 423.
Daily, Parish of, 676.
Dalgenross, 76.
Dalmeny Church, 577, 613.
Dalpatrick, 132, 138.
Dalriads. *Vide* Scoti.
Dalry, Parish of, 419.
Dalrymple, Parish of, 678.
Dalrymple, Valley of, 410.
Danes' Pipes, 679.
David I., 604, 606, 610, 616.
David II., 88, 676.
Decorated Style, Scottish, 617.
Deer's Horns in graves, 142, 463.
Deil's Dike, 404.
Dentated Bronze Ring, 393.
Dia dioghaltus, 655.
Dick, Sir Alexander, 225.
Dirks, Celtic, 505.
Divinities, Local, 277, 375, 398.
Dog, remains of, found in tumuli, 51, 53, 552.
Dolphinton, Parish of, 318.
Donald Bane, 479.
Donside, Monolithic circle at, 111.
Doo-Cave, 88.
Doon, Loch of, 31.
Douglas, Archibald, fourth Earl of, 632.
Down, Hill of, 61.
Dragon Ornament, 356, 447, 448, 541.
Dranandow, Moor of, 60.
Draughtsmen, 562.
Dream of the Holy Rood, 548.
Dress, Remains of Ancient, 328.
Drimnamucklach, 266.
Druid stone, 334.
Druidical Patera, 148.
Druidical Theories, 109.
Druids, 104, 109, 345.
Druid's beads, 304.
Drum of Knockman, 61.
Drumandruin, Fingal's Cave at, 88.
Drumduan, Moss of, 38.
Drumlawhinnie, 60.
Drumselch Forest, 583.
Dublin, 573.
Dublin, Phœnix Park, 67.
Duddingstone Loch, 225, 245.
Duich, Loch, 561.
Dumbartonshire, 72, 138, 454, &c.
Dumfriesshire, 30, 57, 61, 62, 200, 276, 278, 313, 354, 395, 437, 448, 457, 543, 680, &c.
Dun Dornadil, 421.
Dunadeer, 414.
Dunbarré, 501.
Dunblane, 68.
Dunblane Cathedral, 614, 618.
Duncan, King, 491.
Duncan, Maormor of Caithness, 491.
Duncan, Rev. Dr., 544.
Duncruib House, 48.
Dunfermline Abbey, 607, 618, 641.
Dunipace Brooch, 530.
Dunipace, Mounds of, 530.
Dunkeld Cathedral, 622, 628.
Dun-Mac-Sniochain, 414.
Dunmore Rock, 33.
Dunnichen Parish, 295, 497, 499.
Dunnichen Stone, 497, 499.
Dunning, Parish of, 57.

Dunoon, Parish of, 67, 71.
Dunrobin Castle, 498.
Duns. *Vide* Burghs.
Dunstaffnage Castle, 577.
Dunstaffnage Chesspiece, 577.
Duntocher, 376.
Dunvegan Cup, 669.
Durendal, The Sword, 211.
Durham Cathedral, 608, 641.
Dwarfie Stone of Hoy, 89.
Dwellings, Primitive, 74.

Early English Style, 614, 645.
Earth Houses. *Vide* Weems.
East Broadlaw, 171.
East Kilbride, Parish of, 299, 438.
East Langton, 433.
East-Lothian, 48, 56, 58, 133, 134, 142, 279, 394.
East Rogerton, 489.
Ecclefechan, 200, 313.
Ecclesiastical Antiquities, 648.
Ecclesiology, Chronological Table of, 647.
Ecclesiology, Irish, 582, 587, 591.
Ecclesiology, Medieval, 600.
Ecclesiology, Primitive, 582.
Edda, The, 211, 213.
Edenham, Founding of the Church of, 605.
Edgar, King, 604, 605.
Edinburgh, 71, 275, 286, 383, 463, 678.
Edinburgh Castle, 672, 687.
Edinburgh, St. Giles's Church, 623, 629, 630, 649.
Edinburgh, Trinity Collegiate Church, 624, 625, 635, 652.
Egbert of Wessex, 600.
Egilshay, St. Magnus's Church, 587, 590.
Egyptian Antiquities, 2, 5, 29, 197, 204, 306, 308, 698.
Eigg, Island of, 147.
Eilan Donan Castle, 561.
Eildon, 277.
Eildon Hills, 261, 368.
Eirde Houses. *Vide* Weems.
Elephant, Fossil, 32, 33.
Elephant, Symbolic, 501.
Elf-arrow, 126.
Elf-bolt, 124.
Elf-furrows, 123.
Elfin-pipes, 679.
Elginshire, 293.
Elk, Fossil, 22.
Elphinstone Tower, 142.
Emblems. *Vide* Symbols.
Encircled Barrow, 55.
Enclosed Barrow, 55.
Encrinite, 701.
Entrochi, 701.
Eric, King of Norway, 619.
Erland, Son of Harold, 429.
Eschricht, Professor, 10.
Eskdale, 396.
Ethnology, 10, 11, 160, 229, 350, 353, 698.
Etive, Loch, 63, 76.
Evie, Parish of, 424.
Eyed Spear-heads, 262.

Fairy Beads, 701.
Fairy Hillock, 309.
Falkirk, Carse of, 32, 39.
Felis spelæa, 25.
Fendoch Camp, 436.
Feteress, Parish of, 179.
Fetteresso, Tumulus at, 329.
Fiac, Bishop, 657.
Fibula of Jet, 295.
Fibula, Ring, 516.
Fibula, Roman, 378, 394.
Fibulæ, Silver, found at Stennis, 46.
Fictilia. *Vide* Pottery.
Fifeshire, 72, 91, 117, 129, 151, 199, 271, 286, 322, 393, 432, 453, 511, &c.
Fingal's Cave, Arran, 88, 90.
Fingal's Cauldron Seat, Tormore, 99.
Finger-Rings, 327, 328; *Pref.* xx.
Finlay, son of Ruari, 491.
Firmus, M. Cocceius, 372.
First-Pointed Style, 614, 645.
Fishwives' Causeway, 385.
Flail-Stone, 132.
Flanders Moss, 301.
Flint Arrow-heads. *Vide* Arrow-heads.
Flint Flakes, 120, 185.
Floor Tiles, 652.
Fordun, 482.
Forfarshire, 67, 77, 79, 127, 295, 300, 309.
Forfar, Witches' Bridle at, 693.
Forge-Tongs, Iron, 407.
Forges, Ancient, 224, 405, 407.
Forres Stone, 498, 502.
Forth, Frith of, 305, 383, 387, 511.
Fortrose Cathedral, 635, 666.
Forts, Hill, 409.
Forts, Ring, 409.
Forts, Vitrified, 413.
Fowlis, Village of, 59.
Freemasonry, 534, 638.
Frette Ornament, 446.
Frier's Carse, 395.
Frith of Forth, 305, 383, 387, 511.
Fusion of Rocks, 415.

Gadeira, 197.
Galant. *Vide* Weland.
Galgacus, 39, 471.
Galloway, 61, 123, 138, 235, 252, 258, 265, 315, &c.
Games, 562.
Garthland, 271.
Gaskhill, 454.
Gateside, 432.
Gaulish Coinage, 198.
Gauls, 11.
Gavr' Innis, 331.
Geology, 6, 21, 25, 38, 336, 455, 697.
Geometric Style, Scottish, 617.
Ghost's Knowe, 271.
Gigantic Remains in Tumuli, 48.
Gladsmuir Parish, 152.
Glasgow, 34.
Glasgow Cathedral, 614, 617.
Glass Beads, 303.
Glass Vessel, 307.

Glencoe, 419.
Glenelg, 421.
Glenelg, Burgh of, 421, 423.
Glenholm, Parish of, 325.
Glenkens, 564.
Glenkindrie, 78.
Glenlyon Brooch, 220, 560.
Glenorchy, 407.
Glenquicken, Moor of, 131.
Glenroy, 156.
Glenshiora, 413.
Gold, 204, 207, 214, 216, 291.
Gold Corslet, 272.
Gold Relics, 204.
Gold Rings, 307-317.
Gold Vessels, 271.
Golden Age, 204, 210.
Graitney Mains, 57.
Greek Coins found in Britain, 200.
Greek Inscriptions, 201.
Greek Sepulchral Rites, 50.
Greek Vases, 230.
Green Cairn, 311.
Greenlaw, 444.
Gregory, Donald, 173, 527.
Grey Cairn, 61.
Gristhorpe, Remarkable Tumulus at, 461.
Guanora's Tomb, Queen, 501.
Guilloche Ornament, 445.
Guise Palace, Edinburgh, 637.
Guttorm, 490.

Haco, King, 323, 525, 527, 530.
Haddington, Abbey Church, 623, 633, 652.
Hadrian, Legionary Inscription to, 396.
Hæmatite, or Specular Iron, 359.
Haer Cairns, 92.
Hailes, Lord, 14.
Hair-Pins, 328, 551, 554.
Halkirk, Parish, 139.
Hallivich, Cornwall, 197.
Hall, Sir James, 415.
Hammers, Stone, 134.
Hare Stane, 92.
Harlaw, 93.
Harlaw, Battle of, 649, 651.
Harold Harfager, 429, 487.
Harold the Fair-Spoken, 429.
Harpoon, Primitive, 33.
Harray, Loch of, 106.
Hatchet, Stone, 129.
Hatlock, 301.
Havard, Earl, 112.
Havardsteigr, 112.
Hawkhill, 496.
Hawking Craig, Hunterston, 524.
Hawk-Stane, 94.
Hawthornden, Ancient Sword at, 683.
Hawthornden, Caves at, 88.
Head-Rings, Bronze, 326, 450, 451.
Heather Ale, 76.
Hebrides, 19, 323, 488, 489, 493, 598, 648.
Helmet, Bronze, 266, 454.
Helmet, Iron, 438, 552.
Hercules, the Tyrian, 201.
Heriot's Hospital, Edinburgh, 647.
Herlaw, 64.
Hiberni, 195, 468.
Hibbert, Dr. Samuel, 109, 315, 328, 414, 417.
Hieroglyphics, Egyptian, 5.
Hill Forts, 409.
Hirdmane Stein, 95.
Historical Sculptures, 503.
Hoare Stones, 92, 594.
Hoddam, Ancient Church of, 400, 550.
Hoddam Castle, 396.
Holm in Orkney, 44.
Holy Island, 89, 530.
Holyrood, Abbey of, 582, 586, 610, 622.
Holyrood, Seal of, 582.
Holy Rood, Dream of, 548.
Horse Collars of Stone, 156.
Horse-Furniture, 454, 456, 458, 552.
Horse-Shoes, Ancient, 437.
Horse, Wild, 455.
Horses, Skeletons of, found in Tumuli, 455, 456, 552.
Horus, Statuette of, 198.
Houstoun, Parish of, 292.
Hoxay, How of, 425.
Huly Hill, 56.
Hunterian Museum, 36.
Hunterston, Runic Brooch, 521; *Pref.* xxiv.
Hunthills, 435.
Hyæna spelæa, 25.

Iberians, 11.
Iceland, 8, 484, 556, 575.
Identification, Archæological, 335, 427, 527, 532, 546.
Imitation, Absence of, in primitive art, 340.
Inch Colm, Monastery of, 599, 610.
Inches, Temple of, 60.
Inchinan, Parish of, 298.
Inchture, Parish of, 94.
Incised Axe-Blades, 253.
Incised Celt, 257.
Incised Sepulchral Slabs, 651.
Incised Spear-heads, 261.
Infibulation, 310.
Inhumation, 50, 53.
Interlaced Knotwork, 445, 538, 550.
Inveresk, 369, 386, 388.
Invergowrie, Sculpture at, 524.
Inverness, 38, 443.
Inverness-shire, 74, 87, 114, 142, 263, 315, 341, &c.
Inverury, 419.
Iona, 173, 483, 488, 506, 650, 654.
Iona, Abbot John of, 508.
Iona, Cross of Lauchlan M'Fingon, 503.
Iona, Golden Chalice of, 668.
Iona, Inscribed Tombs at, 506.
Iona, Tomb of the Prioress Anna, 500.
Iona, Tomb of Bishop Patrick, 507.
Iona, Tomb of Eogain, 507.
Iron Foundries, 405.
Iron, Introduction of, 347.
Ironmacaunnie Moor, 563.
Iron Period, 347.

Iron, Personal Ornaments of, 351.
Iron Relics, 432, 435, 436, 437, 440, 454, 552.
Iron, Source of, 349, 357.
Iron, Superstitions regarding, 439.
Iron Swords, 348, 352, 356, 435, 552.
Isis, Bifrontal Bust of, 197.
Islay, Island of, 316, 323, 407.

James I., 638.
James II., 633.
James III., 634.
James IV., 580, 634, 636.
James V., 581.
Jet, Ornaments of, 155, 258, 292, 330.
Jet Rings, 298.
Job, Era of, 2.
Jougs, The, 690.
Jura, Island of, 206.

Kaimes Hill, 75.
Kells, Book of, 497.
Kells, Parish of, 118.
Keltnie, Pass of, 54.
Kenneth MacAlpin, 474.
Kent's Hole Cave, 189.
Ketil, 490, 494.
Kettles. *Vide* Cauldrons, Tripod, Camp-Kettles.
Kilblain, 30.
Kilbride, Parish of, 55, 64, 71.
Kildrummie Castle, 78.
Killin, Parish of, 662.
Kilmorie, Parish of, 99.
Kilmun, 71.
Kilpatrick, 469.
Kilpatrick-Fleming, Parish of, 354.
Kilsyth, 170, 410.
Kiltearn, 62.
Kimmeridge Bay, 297.
Kimmeridge Coal-Money, 296.
Kinaven, 37.
Kincardine Moss, 34, 224, 274.
Kincardineshire, 179, 279, 288, 329.
Kineff, Parish of, 288, 327.
Kinellar Parish, 301.
Kinellar, Standing Stones at, 497.
King's Cave, Arran, 89.
King's Stone, 87.
Kinghorn, 286.
Kinkell, Church of, 651.
Kinross-shire, 141.
Kintore Parish, 351, 419.
Kintyre, 483.
Kirchner, Father, 5.
Kirkcudbrightshire, 31, 60, 76, 116, 131, 255, 419, 443, 542, 563, &c.
Kirk Andreas Cross, 538.
Kirk Braddan Cross, 542.
Kirk Bride Cross, 538.
Kirk Michael Crosses, 538, 540.
Kirkintilloch, Parish of, 389, 392.
Kirkintilloch, Roman Station at, 389, 392.
Kirkmichael, Parish of, 680.
Kirknewtown, Parish of, 433.
Kirkurd Parish, 132.
Kirkwall Cathedral, 536, 571, 592, 593, 611, 667.
Knaph, The God, 281.
Knitted Tissues, 328.
Knives, Flint, 127.
Knocklegoil Cairn, 64, 65.
Knock Scalbert Fort, 410.
Knotted Funicular Torc, 318.
Knotwork Ornament, 445, 538, 550.
Kyle, District of, 333.

Ladykirk, Parish Church of, 634.
Lady's Purse, The, 279.
Lamlash Bay, 530.
Lamlash Bay, Cromlechs at, 66.
Lamps, Roman Bronze, 383, 390.
Lamps, Roman Terra Cotta, 403.
Lanarkshire, 37, 55, 79, 132, 138, 200, 306, 318, 320, 395, 440, 680, &c.
Lance, Bone, 33.
Lance-heads. *Vide* Spear-heads.
Laufine, 317.
Langside, Battle of, 299.
Langside, Field of, 56.
Lapps, 11.
Largiebeg, Point of, 314.
Largo, 129, 271, 320.
Largo, Bay of, 91, 320, 511.
Largo Law, 511.
Largo Stone Cross, 514.
Largs, 457.
Largs, Battle of, 523, 524.
Leadhills, 206.
Lead, Mines of, 206, 392.
Lead, Roman Pigs of, 392.
Leaf-shaped Swords, 226, 228, 264.
Ledberg, 269.
Legionary Inscriptions, 374.
Leith, St. Mary's Church, 176, 635, 650.
Lerwick, 129, 425.
Lesmahagow, Parish of, 395.
Letham, Den of, 295.
Leuchar, Monolithic Group at, 113.
Leuchar Moss, 74.
Lever, Bronze, 259.
Lewis, Island of, 97, 115, 150, 567.
Leys, Circle of, 114, 341.
Lia Fail, 97.
Liddle Moat, 411.
Lincluden Abbey, 625.
Lindisfarne, 480.
Linlithgow, St. Michael's Church, 623, 628, 633, 635.
Linlithgowshire, 171, 577.
Linlithgow, Parish of, 171, 577, 623.
Lismore, 132.
Lituus, or Bronze Wind Instrument, 240, 241.
Lituus, Gold, or Rod of Office, 114, 341.
Local Divinities, 277, 375, 397, 398.
Lochaber Axes, 685, 686.
Lochar Moss, 30, 276, 395, 448.
Lochleven, Monastery of, 604.
Lochwinnoch, 32.
Logie, Parish of, 300.

Logic, Three Laws of, 299.
Long Barrow, 48, 54.
Longside, Parish of, 462.
Lollius Urbicus, 365, 373.
Lorn, Brooch of, 220, 560.
Lumphanan, Parish of, 132, 327, 491.
Lunar Ornaments, Silver, 444.
Lundin, Stones of, 91, 512.
Luntrethin, Church of, 662.
Lymphad, 509.

Macbeth, 492, 600.
Macbeth's Stane, 94.
Machairodus Latidens, 22.
Magnetite, Iron Ores, 359.
Magnus, Erlendson. *Vide* St. Magnus.
Magnus, Prince of Man, 670.
Maiden Coronet, 452.
Maiden Stone on Bennochie, 501.
Maiden, The Scottish, 689.
Malacca, Mines of, 196.
Malcolm I., 491, 529.
Malcolm II., 606.
Malcolm Canmore, 468, 479, 492, 601, 607.
Malcolm's Grave-Stone, King, 500.
Manillas, 309.
Man, Isle of, 488, 489, 528, 536, 537.
Manx Runic Alphabet, 528.
Margaret, Queen, 602, 605, 607, 609.
Margaret of Norway, 618.
Mar's Hill, 314.
Martin's Stone, 501.
Mason-marks, 534, 640.
Masonry, Anglo-Saxon, 584.
Masonry, Roman, 368.
Masonry, Scottish, 598.
Mazer-Cups, 674.
Mazer found at Castle Merdon, 672.
Mazer of the fourteenth century, 673.
Mazers, 671.
Mazers, King Robert the Bruce's, 671.
Mearns, The, 482.
Medicine Stamp, Roman, 393.
Medieval Arms and Armour, 682.
Medieval Crania, 175.
Megaceros Hibernicus, 22.
Meigle Cross, 498.
Meigle Stone, 502.
Meiklewood Moss, 129.
Melbrigda Tönn, 490, 528.
Melford, 453.
Melrose Abbey, 621, 623, 635.
Memorial Stones, 91.
Memsie, 265, 287, 434.
Menes, Era of, 2.
Menzie, Cairn of, 122.
Merlsford, 393.
Merton Mere, 31.
Metals, Introduction of, 191.
Metals, Names of, 162, 350.
Middleby, 458.
Mid-Lothian, 67, 71, 325, 327, 389, 433, 441.
Minerva, Roman Bronze of, 389.
Mines, Ancient Copper, 206, 219.
Mines, Ancient Gold, 206, 207, 216.
Mines, Ancient Iron, 219.
Mines, Ancient Lead, 206, 219.
Mines, Ancient Tin, 196.
Minniegaff, 60.
Mirror and Comb, The Symbol of the, 500.
Moffat Parish, 394.
Monogram of the Virgin, 638.
Monolithic Art, 103.
Mons Meg, 686.
Montrose, 169, 284.
Monumental Character of Tumuli, 52.
Monymusk, Cufic Coin found at, 521.
Monymusk, Culdee House of, 604.
Monzie, Parish of, 77.
Moray House, Branks found at, 693.
Morayshire, 254, 261, 443, 446.
Morningside, Village of, 681.
Mortars, Stone, 139, 426.
Mortlach, Church of, 606.
Mortonhall, 441.
Moss-Side, 270.
Mos Scotorum, 480, 482.
Moulds, Celt, 223.
Moulds, Stone, 223.
Moulds, Spear, 223.
Mousa, Burgh of, 420, 429.
Mythology, Scandinavian, 9.

Nairn, River, 63.
Names of Metals, 162, 350.
Necklaces of Shells, 158.
Necklaces of Jet, 292, 330.
Nectan, King, 482, 594.
Needles, Bronze, 328.
Nether Urquhart Cairn, 169.
Netted Garments, 328, 330.
Newbattle, 56.
Newstead, 87, 171, 370, 380, 401.
Newgrange, Cairn of, 149, 332.
Newton of Tillicairn, 319.
Newton in Garioch, Inscribed Stone at, 506.
Newton-Stewart, 31.
Nicholas, Bishop of Man, 532.
Nidung, King, 361.
Niebelungen Lied, 213.
Nillson, Professor, 10, 12, 25.
Nisbetmuir, Field of, 437.
Norici, 349, 358.
Noricum, 360.
Norrie's Law, Silver Relics of, 499, 511.
North-Berwick, 133.
North-Berwick Abbey, 580, 650.
North-Berwick Law, 389.
North-western Migration, Physical Causes of, 699.
Nuada Neacht, King, 323.
Nuraghes, 423.

Oculist's Stamp, Roman, 393.
Odin, Black Stone of, 101.
Odin, Stone of, Stennis, 99.
Ogham Inscription, 506.
Olave, King, 322.
Old Liston, 56.
Orwell Parish, 141.
Orkney, 44, 51, 55, 70, 81, 95, 99, 135, 138,

286, 307, 310, 325, 424, 442, 487, 521, 551, 588.
Ornaments. *Vide* Annular, Guilloche, Dragon, Serpentine, Chevron, Spiral, Frette.
Orphir, Parish of, 598.
Orvar Odd's Saga, 125.
Oval Brooch. *Vide* Brooch, Oval.

Paisley Abbey, 618, 621, 622, 625.
Pallas Armata, Roman Bronze of, 389.
Palstave, 254.
Palstave, Looped, 256.
Papa, Application of the term, 486.
Papey, Holm of, 82.
Parthian Coin, 200.
Patella, Roman, 242, 395.
Patera, Inscribed Tin, 197.
Patera, Stone, 148.
Patrick, Tomb of Bishop, at Iona, 507.
Pear-shaped Weems, 87.
Pech's Knife, 128.
Peeblesshire, 132, 317, 325.
Pelasgi, 11.
Penicuick, 61.
Penicuick House, 256, 261, 270, 458, 578.
Pentland Hills, 129, 207.
Perforated Stones, 99.
Perpendicular Style, 634.
Personal Ornaments, 144, 291, 442, 677.
Perthshire, 54, 57, 59, 68, 115, 263, 264, 311, 324, 436, 447, 642, &c.
Pettycur, 259.
Phœnicians, 197, 198, 217, 248, 305, 349.
Piccardach, 367, 470, 474, 477.
Pictish Runes, 534.
Pictish Towers. *Vide* Burghs.
Picts, 367.
Picts' Houses, 83, 142.
Picts' Kilns, 75.
Picts, Northern. *Vide* Cruithne.
Picts, Southern. *Vide* Piccardach.
Pier-o-waal, Links of, 551.
Pitalpin, 446.
Pitcaithly, 264.
Pit-dwellings, 74.
Pitlessie, 512.
Pitlochrie, Standing Stones at, 115.
Pitlour House, 151.
Pittenweem, Coins found at, 519.
Poisoned Weapons, 266.
Primitive Period, 21.
Pruning-Hooks, Bronze, 269.
Pond-Barrow, 75.
Port Ellen, 122.
Port Seaton, 48.
Portpatrick Parish, 138, 297.
Pot Querne, 152.
Pot Quernes, Irish, 153.
Potters' Stamps, Roman, 401.
Potters' Wheel, 280, 281, 289, 292.
Pottery, American, 290, 340.
Pottery, Glazed, 433, 434.
Pottery, Medieval, 678.
Pottery, Ornamented, 339.
Pottery, Primitive, 279, 333.
Pottery, Roman, 355, 381.
Powder-Horn, Highland, 221.
Ptolemy I., Coins of, 200.
Purbeck, Isle of, 297.
Purgatory Hammer, 136.
Pyxes, 676.

Quanterness, Picts' House at, 84.
Quarrel-head, 685.
Queen Mary, 370.
Queen Mary's Law, 56.
Queen Mary's Mount, 299.
Queensferry, South, 334.
Queensferry, South, Monastery, 620, 635.
Quendale, 442.
Querne, Oaken, 34.
Quernes, Stone, 150, 426.
Quetzalcoath, 210.
Quigrich, The, 664.

Rafford, Parish of, 293.
Rannoch, Moor of, 324.
Rathen, Parish of, 434.
Ratho, 67, 170.
Ratho, Parish of, 75, 288.
Rattray, Hill of, 57.
Reaping-Hooks, Bronze, 269.
Recumbent Effigies, 648.
Red Abbeystead, 380.
Red-Hand, Symbol of, 232.
Reel-Pins, 563.
Relig Oran, 508, 510.
Religion, 72, 100, 162, 265, 342, 344, 411.
Rendale, 55.
Renfrewshire, 32.
Retzius, Professor, 10.
Revival of Medieval Architecture, 643.
Rhynie, Village of, 413.
Richard of Cirencester, 379.
Ring and Staple, 227.
Ring, Calicinated, 314.
Ring, Dilated Penannular, 310.
Ring Fibula, Bronze, 327.
Ring Fibula, Silver, 516.
Ring, Inscribed Runic, *Pref.* xx.
Ring Money, African, 309.
Ring Money, Gold, 308.
Ring Money, Iron, 351, 353.
Ring Money, Silver, 444.
Ring-Pin, Bronze, 551, 555.
Rings, Bronze, 288.
Rings, Finger, 327, 328.
Rings for the Hair. *Vide* Head-Rings.
Rings, Sacramental, 302.
Rings, Shale, 298.
Rings, Stone, 301.
Rings, Wedding, 303.
Ritston, 15.
Roag, Loch, 115.
Robert, Bishop of St. Andrews, 613.
Robert the Bruce, 220, 560, 619.
Rocking Stones, 117.
Rod of Office, Gold, 114.
Rognwald, 489.
Roman Arch, Edinburgh, 387.

Roman Arts, Influence of, 20.
Roman Bronze Lamp, 383, 390.
Roman Coins, 199, 383, 384, 387, 390.
Roman Invasion, 363.
Roman Pigs of Lead, 392.
Roman Sepulchral Rites, 50.
Roman Shafts, 381.
Roman Spear, 382.
Roman Wall, 365, 372.
Romanesque Parish Churches, 614.
Romanesque Style, 607.
Ronaldshay, Island of, 286, 425.
Ronecht, The, 662.
Rosetta Stone, 6.
Roslin, Collegiate Church of, 626, 629, 641, 651.
Rossie, 58.
Rosskeen, Parish of, 223.
Ross-shire, 63, 99, 223, 268, 294, &c.
Rothesay Chapel, St. Giles's Church, 629, 632.
Rothesay, David, Duke of, 632.
Rottenmoss, 270.
Round Arch, Use of, 616, 622, 626.
Round Tower, Abernethy, 587, 593.
Round Tower, Brechin, 587, 593, 595.
Round Tower, Brechin, Doorway, 596.
Round Tower, Egilshay, 587.
Round Towers, Irish, 585, 587.
Round Towers, Scottish, 585.
Rowsey, Island of, 436.
Roxburghshire, 23, 87, 261, 435, 451, &c.
Runes, Anglo-Saxon, 534, 543.
Runes, Pictish, 534.
Runes, Scoto-Scandinavian, 528.
Runic Brooch, Hunterston, 521; *Pref.* xxiv.
Runic Inscription, Greenland, 537.
Runic Inscription, Shetland, 536.
Runic Inscriptions, 313, 493, 526, 531, 536, 539, 550; *Pref.* xx. xxv.
Rutherglen, Parish of, 55, 306.
Ruthwell Cross, 534, 543.

Sacæ, 477.
Sacramental Rings, 302.
Samian Ware, 385, 401.
Samoyedes, 11.
Sanday, 70.
Sandwick, 66, 143, 551.
Sarcophagus, St. Andrews, 503.
Savrock, Weem at, 82.
Saxon Conquest, 601, 605.
Scabbard, Bronze Sword, 441.
Scales, Bay of, 143.
Scalloway, Bay of, 588.
Sceptre-head, Gold, 317.
Schehallion, The mountain, 447.
Scuir-na-fion, Glencoe, 419.
Scandinavian Antiquities, 355, 461, 522, 541, 551, 559.
Scandinavian Mythology, 9.
Scoti, 469, 473, 476, 477, 593.
Scoto-Scandinavian Relics, 522.
Sculpture, Primitive, 381.
Sculptured Standing Stones, 495.
Sculptures, Historical, 503.
Seals, Value of Ancient, 574, 582, 599, 613.
Seamhill Moat, 142.
Segmental Arch, Use of, 626.
Semicircular Arch. *Vide* Round Arch.
Sepulchral Memorials of the Bronze Period, 331.
Sepulchral Memorials of the Iron Period, 495.
Sepulchral Memorials of the Stone Period, 41.
Sepulchral Rites, 41, 48, 73, 280, 453, 456, 460.
Sepulchral Tablet, Roman, 400.
Sepulchral Vessels, 271.
Sepulchres of the Bronze Period, 331.
Sepulchres of the Iron Period, 453.
Sepulchres of the Stone Period, 41.
Serpentine Ornament, 356.
Seton, Collegiate Church of, 623, 625.
Seton, Sir Christopher, 684.
Severus, Sculptured Head of, 386.
Severus, Septimius, 366, 379, 386, 403.
Shafts, Roman, 381.
Shale, Ornaments of, 155, 179, 292, 300.
Shapinshay, Parish of, 81, 310.
Sheal Loch, 285.
Shell-shaped Brooch. *Vide* Brooch, Oval.
Shetland, 129, 146, 149, 536, 588.
Shields, Bronze, 267.
Shields, Kite-shaped, 572.
Ship, Ancient, 234.
Ship Barrow, 57.
Shoeing Horses, Antiquity of, 438.
Shotts, Parish of, 200.
Sidla, Hill of, 67.
Sigurd, 489, 490, 589.
Silbury Hill, 41, 43.
Silver, 204, 208, 291, 442.
Silver Armour of Norrie's Law, 511.
Silver Relics, 442, 499, 511.
Siward, Earl of Northumberland, 492, 601.
Skara, 143.
Skene, Parish of, 74, 113.
Skye, Isle of, 126, 157, 269, 578.
Slate, Plates of, 144, 184.
Slateford, Parish of, 325.
Slave's Collar, Scottish, 691.
Sling Stones, 140.
Sluie, Moor of, 254, 261.
Smiths, Celtic, 406.
Snake Bracelets, 446.
Snake Ornament. *Vide* Dragon.
Spain, Ancient Mines of, 207.
Spear-heads, Flint, 127.
Spear-heads, Bronze, 226, 232, 241, 260.
Spear-heads, Iron, 382, 435, 436, 437, 453.
Spiked Axe, 253.
Spiral Ornament, 445.
Springfield, Glasgow, 36.
St. Andrew's Cathedral, 615.
St. Andrews, Priory of Canons Regular of, 604, 613.
St. Andrews, Sarcophagus, 503.
St. Anthony, Chapel of, 585, 598.
St. Blane, 614.
St. Blane, Church of, Bute, 615.
St. Columba, 150, 469, 483.

St. Columba, Bell of, 654.
St. Columba, Mound of, 57.
St. Cuthbert, 531, 608, 654.
St. Cuthbert's Beads, 701.
St. Donnan, Burial Place of, 147.
St. Erth, Parish of, Cornwall, 197.
St. Fillan, Bell of, 662.
St. Fillan, Crosier of, 664.
St. Fillan, Pool of, 663.
St. Finan, 480, 608.
St. Finnian, 150.
St. Giles's Arm-bone, 633, 649.
St. Giles's Church, Edinburgh, 623, 629, 630, 649.
St. Kentigern, 522, 659.
St. Kentigern, Bell of, 659.
St. Kieran, Cave of, 483.
St. Rule, 483.
St. Rule, Cave of, 89.
St. Rule, Church of, 611.
St. Magnus, 592, 668.
St. Magnus, Cathedral of, 536, 571, 592, 595, 611, 667.
St. Magnus, Egilshay. *Vide* Egilshay.
St. Madoes, Parish of, 94, 542.
St. Maoliosa. *Vide* St. Molio.
St. Margaret, 603, 605, 607, 609.
St. Margaret, Chapel of, Edinburgh Castle, 388, 609.
St. Marnan, 531.
St. Michael's Church, Linlithgow, 623, 628, 633.
St. Molio, 89, 531.
St. Mungo. *Vide* St. Kentigern.
St. Ninian, 480, 485.
St. Ninian, Bell of, 660.
St. Olaf, 557, 588.
St. Oran, 484.
St. Oran, Chapel of, 484.
St. Orland's Stone, 499.
St. Palladius, 481, 592.
St. Patrick, 469, 481, 657.
St. Ringan. *Vide* St. Ninian.
St. Serf, 481, 592.
St. Serf, Monastery of, Lochleven, 604.
St. Servanus. *Vide* St. Serf.
St. Vigeans, Inscribed Cross of, 501, 505.
St. Woloc, 531.
Standing Stones, 91.
Standing Stones, Sculptured, 495.
Steeds' Stalls, The, 87.
Stennis, Cromlech at, 66.
Stennis, Loch of, 106.
Stennis, Stones of, 44, 102, 105, 109.
Stevenston, Parish of, 300.
Stirling, Carse of, 39.
Stirlingshire, 33, 66, 70, 271, 395, 530.
Stitchel, Village of, 451.
Stone Balls, 138.
Stone Basin, 149.
Stone Chairs, 531.
Stone Coffins, 651.
Stone Horse-Collars, 156.
Stone Implements, 120, 206.
Stone of Odin. *Vide* Odin.
Stone Period, 21.
Stone Urn, 146.
Stone Vessels, 146.
Stonehenge, 353.
Strachur, Parish of, 129, 253.
Stránraer, 235.
Strathblane, Parish of, 72.
Strathdon, Parish of, 78.
Strathfillan, 662.
Stromness, 51.
Strongholds, 408.
Sturla the Skald, 525.
Sunderland, Islay, 316.
Sutherlandshire, 269, 285, 422, &c.
Suttee System, 51.
Swenedrow, 436.
Sword, Silver Hilt of, with Runic Inscription, 550.
Swords, Bronze, 226, 228, 242, 245, 247, 264.
Swords, Iron, 348, 352, 356, 435, 436, 437, 441.
Swords, Medieval, 682.
Swords, Two-handed, 683.
Sword-Sheath, Bronze, 441.
Symbols, Christian, 499, 500, 504.
Symbols, Pagan, 499.

Tablemen, 565, 567, 581.
Table-stones, 562.
Tanist Stones, 97.
Tealing, Parish of, 77.
Teeth, State of, in Tumuli, 186.
Tellve Castle, 421.
Temple, The, Largo, 320.
Ternavie, 57.
Teutonic Period, 347.
Tiger, Cave, 26.
Tiles, Floor, 652.
Tin, 195.
Tin, Vessels of, 197.
Tings, Law, 113.
Tiree, 309.
Thane Stane, 502.
Theodosia, 388.
Thor, Stone of, 110.
Thor, Temple of, 110.
Thorfinn, 491, 594, 601.
Thorstein, The Red, 490.
Thrumster, 319.
Thumbkins, 689.
Toltecans, 167, 210.
Tongland, Parish of, 116.
Top-o-Noth, 413.
Torcs, Beaded, 449.
Torcs, Eastern Origin of, 326.
Torcs, Gold, 317, 318, 326.
Torthorwald Parish, 30.
Torture, Instruments of, 688.
Tracery, Scottish Window, 621, 627, 646.
Tranaby, Links of, 551.
Tranent, 394.
Trenches, 418.
Trimontium, 368, 380.
Tripods, Bronze, 273, 276, 278.
Troddan, Castle, 421.
Tulloch, Bishop, 485, 650, 667.
Tullyallan Castle, 279.
Tullynessle, Parish of, 111, 148.

Tumuli, Classification of Scottish, 44.
Tumuli, Classification of English, 43.
Tungland, Abbot of, 216.
Tungland, Friar of, 215.
Turditani, 248.
Turning-Lathe, 292.
Tweeddale, 301.
Tyuron, Parish of, 61.
Tytler, 14.

Uig, Parish of, 567.
Umbone. *Vide* Boss.
Upper Dalachie, 311.
Urns. *Vide* Pottery.
Urns open at both ends, 439.
Urns, Sepulchral, 279-290, 299.
Urquhart, 168, 453.
Ursus spelæus, 23.
Uxmal, 232.
Uyea, Island of, 146.

Vælund, 215.
Valentia, Province of, 367.
Vea, Stones of, 66.
Vestrafiold, Cromlechs at, 66.
Vikings, The, 111, 321, 322, 429, 486, 487, 490, &c.
Vinland, 9.
Vitrified Fort at Craig Phaidrick, 134.
Vitrified Forts, 413.

Wallace, Sir William, 275, 685.
Wallace-Bolt, 685.
Walls, Parish of, 129.
War Chariot. *Vide* Chariot.
Watch Stone, Stennis, 107.
Watling Street, 380.
Wayland Smith, 209.
Weapons and Implements of Bronze, 250.
Weapons and Implements of Iron, 431.
Weapons and Implements of Stone, 120.
Wedding-Ring, 303.
Weems, 78, 143, 575, 598.
Weland, 210, 359, 361.
Western Isles. *Vide* Hebrides.
West Kilbride, Parish of, 142, 524.
Westray, 70, 134 307, 325, 440, 551.
Whales, Fossil, 24, 33.
Whetstones, 133.
Whig Hole, Altyre, 419.
White Cairn, 61.
White-Horse Hill, 213.
Whithern, 480.
Whithern, Cathedral of. *Vide* Candida Casa.
Whorle, 137.
Wicklow, County, 207.
Wick, Parish of, 319.
Wideford Hill, Picts' House at, 84.
Wigtonshire, 31, 61, 76, 138, 480, &c.
Wild Beasts, Ancient, 192.
Wild Boar, 144, 175, 193.
William, Bishop of Orkney, 537.
William the Lion, 617.
Wiltshire, 24.
Window Tracery, 621, 627, 646.
Witch Beads, 701.
Witch Stane, Cairnbeddie, 93.
Witch's Bridle, Forfar, 693.
Witches' Stone, Cromlech, 68.
Woman, Primitive Social Position of, 337.
Woodcastle, 411.
Wormestone, 72.
Worthbarrow Bay, 297.
Wyntoun, 13.

Xiphiline, 267, 387.

Yarrow, 334.
Yellow Flints, Bed of Wrought, 121.
Yellow Flints, Weapons of, 122.
Yetholm, Bronze Shields found near, 268.
Yorkshire, 231, 311, 312, 328, 460.
Young, Dr. Thomas, 6.
Ythan, The River, 38.
Yucatan Monuments, 203-341.
Yucatan, Symbol of the Red Hand, 232.

Z Symbol, 499, 515.
Zetland, 420, 443, 487.
Zetland, Earl of, 401, 424.
Zodiacal Sign, Capricornus, 375.

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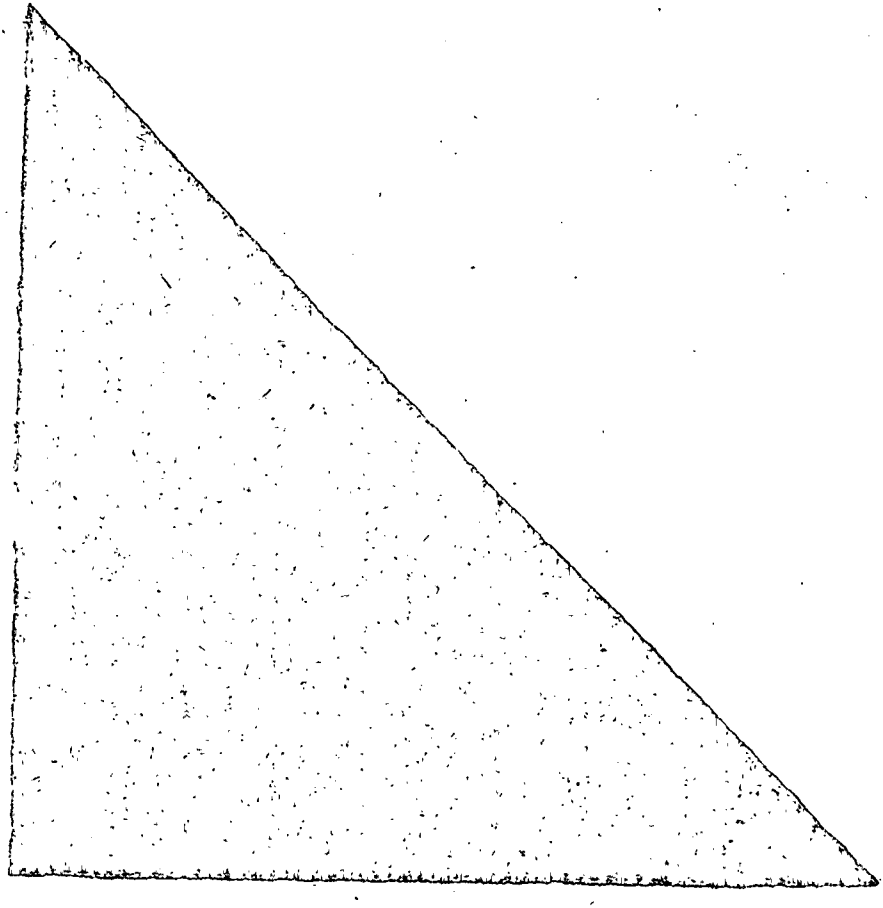

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